

Room Alert™ 26W

Monitoring Real-Time Temperature, Humidity, Power, Flood & More with
Logging, Automatic Server Shutdown, Alerting & Wireless Sensor Monitoring!



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User's Guide &
Reference Manual

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Included With Room Alert & TemPageR...

Device ManageR



Advanced Software For Discovery, Management, Logging, Graphing, Alerting & More

Introduction

What Room Alert 26W Is

Room Alert 26W is the AVTECH Software (AVTECH) solution for '*Monitoring Real-Time Temperature, Humidity, Power, Flood & More with Logging, Automatic Server Shutdown, Alerting & Wireless Sensor Monitoring!*' It is designed specifically to monitor unlimited digital temperature, digital temperature/humidity and switch sensors that can be distributed throughout a room, department or building. Room Alert 26W includes built-in sensors for digital temperature, digital humidity, main power and flood with additional external sensors in the base package for room entry and digital temperature. External ports are built-in for direct connection of a 6 digital sensors, 16 switch sensors and an expansion box. An unlimited number of wireless sensors can be monitored. Wireless sensor monitoring allows the Room Alert 26W to monitor only AVTECH's Wireless Sensor Hubs (WiSH Sensors) via an encrypted and secure private protocol. A WiSH Sensor is provided with the Room Alert 26W and includes a built-in digital temperature sensor, 2 digital sensor ports and 1 switch sensor port. Note that Room Alert 26W is NOT wireless and attaches directly to the network via Ethernet to provide complete security.

Room Alert 26W monitors in real-time and allows alert notifications to be sent via email and email-to-SMS to devices like computers, phones, pagers and PDAs. Users can set up thresholds for temperature and humidity that are rising or falling, and monitor digital power consumption through AVTECH's Digital Power Sensor. Status of attached sensors for power, flood, smoke, air flow, room entry and more is viewed in real-time through Room Alert 26W's web interface and your favorite web browser. Because each Room Alert 26W ID box is SNMP enabled, it can easily be monitored via SNMP savvy applications like *Device Manager*, *OpenView*, *Tivoli*, *Unicenter* and others.

Room Alert 26W is designed to work easily with AVTECH's Device Manager (included) software, which will significantly enhance the alert notification capabilities to allow notification to individuals, groups, hierarchies, different people for different sensors/locations, and different people for different times of the day. With Device Manager, alert notification methods can be expanded to include email, email-to-SMS and much more.

AVTECH's Device Manager software is included FREE and is designed to set up, monitor and manage unlimited numbers of Room Alert and/or TemPageR units across your network. Device Manager will log all sensor data and allows graphing, Pings, firmware updating and much more.

Room Alert 26W is a member of AVTECH Software's Room Alert product line. There are several powerful Room Alert models designed to monitor IT environmental conditions in any type or size computer room or data center. All Room Alert models come with a license to run AVTECH's Device Manager software.

To learn more about Device Manager, Room Alert or TemPageR products, please visit AVTECH Software's primary websites at AVTECH.com, RoomAlert.com and TemPageR.com. To order AVTECH products, visit EnvironmentMonitor.com or call 888.220.6700 / 401.628.1600. AVTECH products are also available through your favorite reseller, just ask them to contact us on your behalf.

Benefits Of Using Room Alert 26W

Know immediately when important or critical temperature and humidity changes and extremes occur within a computer room, data center or other facility, as well as power loss or other conditions that could lead to expensive down time, damaged equipment, lost worker productivity or denied server access. Provide early warnings, allowing staff and management to take actions that can avoid or minimize an event's impact on servers, the network, users, insurance and the IT budget.

Give the IT staff and management 'peace of mind' by keeping them fully informed of critical IT environmental changes regardless of where they are, the time of day or day of the week. Temperature extremes place an enormous stress on computer hardware and are normally caused by failure of the main air conditioning system or a loss of power. Extremes for even a short time can create major problems.

Room Alert 26W provides dynamic, real-time temperature, humidity, power, flood and room entry monitoring of the computer room, data center or other facility. Monitoring of digital temperature and humidity is possible at an unlimited number of locations and as far as 350 feet away from Room Alert 26W. Monitoring of switch sensors such as main/UPS power, flood/water, smoke/fire, motion, room entry, air flow, panic buttons and more is possible as far as 1,150 feet away from Room Alert 26W.

Notification to an unlimited number of individuals or groups, at unlimited temperature and humidity thresholds (too high or too low), and by notification to each users' device of choice, is possible when Room Alert 26W is used with the bundled Device Manager software.

Room Alert 26W can log sensor data when used with Device Manager for tracking or identification of critical times where environment conditions may change to cause problems. This can be useful for justification of new air conditioning equipment, modification of the data center layout or justifying changes like the location of primary servers or the data center itself.

Users interested in 'security monitoring' with network IP cameras should note that Device Manager allows monitoring of IP cameras like the popular Axis 210 which can be located anywhere network-wide. There is no requirement (limitation) to connect any camera directly to our hardware. The motion sensor on the Axis 210 camera can trigger alerts and Device Manager can email the image snapshot to various staff members. These recipients can click on a link within the Device Manager alert (if configured) to view live real-time video through the Axis 210 camera. The combination is very powerful for security conscious organizations, and just a sample of what Device Manager offers to extend the value of Room Alert 26W.

Installation

The initial installation of the Room Alert 26W can be completed quickly and easily provided the instructions below are followed with detail and care. Before beginning, please lay out the contents of the Room Alert 26W package so that the components can all be located and accessed with ease.

Package Contents

The main components included with the standard (default) Room Alert 26W package include:

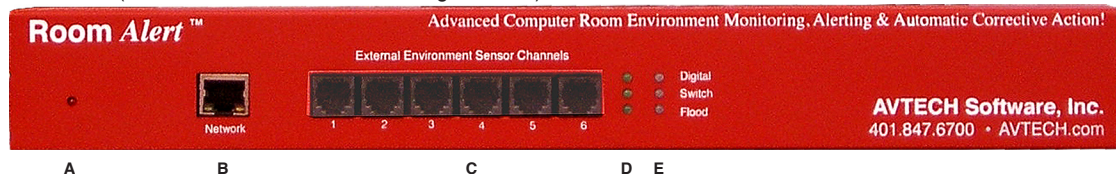
- One (1) Room Alert 26W ID Box (with built-in temperature, humidity, power, flood & UPS)
- One (1) Ethernet Cable (10' length, red)
- One (1) AVTECH 5v 1A Power Adapter (110-240v, 50-60Hz)
- One (1) Digital Temperature Sensor
- One (1) Room Entry Switch Sensor
- One (1) Wireless Sensor Hub (WiSH Sensor, not included with Room Alert 24E)
- One (1) Wireless Antenna (not included with Room Alert 24E)
- One (1) *Room Alert 26W User's Guide & Reference Manual* (you're reading it)
- One (1) AVTECH Update CD
- One (1) Small Room Alert Phillips Screwdriver
- One (1) Set Of Four (4) Rack Mount Bolts & Square Plug Adapters
- One (1) Package Of Literature & Additional Information

NOTE: Some of the components arriving with this package may be individually wrapped and contain additional supporting components. Please remember to keep these components together as they will be required for proper setup. If you received additional components (i.e. like additional sensors) that are not mentioned above, instructional material explaining the proper setup of that component should be included with it. If you cannot find the proper instructional materials, check the included CD or 'Support' and 'Downloads' sections of the AVTECH.com website for any appropriate installation or application note that will instruct you on the proper installation and use of that component. Install those components after the Room Alert 26W setup is completed.

Room Alert 26W ID Box

The graphics below identify the primary components of the Room Alert 26W ID box that are visible on the front and rear panels.

Front View (shown here without rack mounting brackets)

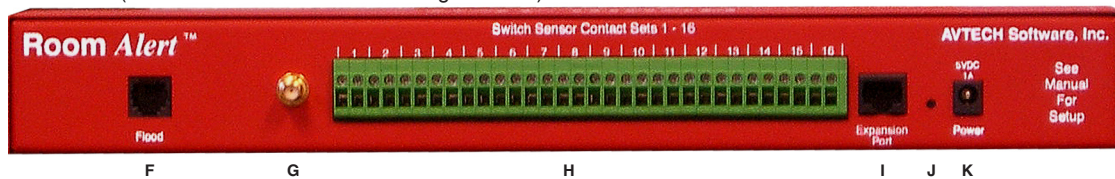


- Built-In UPS Status Indicator** — This LED indicates the current status of the built-in Uninterruptible Power Supply (UPS) of the Room Alert 26W unit. If this LED is illuminated green, this indicates that the Room Alert 26W unit is running on internal battery backup power.
- Network Port** — Attach the Room Alert 26W unit to the network by plugging the Ethernet cable into this port and then connecting the other end to the network. The left LED below the 'Network' port indicates Link status and should light up and remain a solid green or orange color.

The right LED below the 'Network' port indicates Activity status and should blink with network activity on the port. The color of this LED can be green or orange as well. When the device reboots, the Link LED will turn on and off several times. If the Link LED remains unlit and the Activity LED is blinking orange, please refer to the 'Performing Firmware Recovery' section of the 'Advanced Topics' chapter. This is an RJ-45 port.

- C. **External Environment Sensor Channels** (digital sensor channels) — Sensors such as AVTECH's Digital Temperature Sensor, Digital Temperature/Humidity Sensor, Digital Power Sensor and others in the future can be connected to these sensor channels. This is an RJ-11 port.
- D. **Wireless Sensor Hub Signal Strength Indicator** — These three LEDs indicate the signal strength of the last WiSH Sensor to communicate with the Room Alert 26W unit. Signal strength will be indicated by the number of illuminated LEDs. A single lit LED indicates a low signal strength while three lit LEDs indicates a high signal strength. If low signal strength is indicated for a specific WiSH Sensor, then that sensor should be moved or repositioned to a better location.
- E. **Digital, Switch & Flood Sensor Alarm Indicators** — These three LEDs indicate the current alarm status of sensors connected to each of the three corresponding sensor ports or channels. If the LED is green, then there are currently no sensors in an alarm state for that type of sensor. If the LED is red, then one or more sensors of that type are in an alarm state and the web interface for Room Alert 26W should be reviewed for more insight.

Back View (shown here without rack mounting brackets)

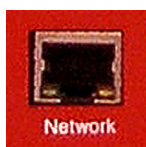


- F. **Flood Sensor Cable Port** — Connect the RJ-11 end of the leader cable of an AVTECH Flood Sensor Cable here in order to utilize the built-in (internal) Flood Sensor. This is an RJ-11 port.
- G. **Antenna RPSMA Connector** — Connect the wireless antenna (not included with Room Alert 24E) to the connector. This antenna provides enhanced communication with WiSH Sensors.
- H. **Switch Sensor Contact Sets** — Connect any AVTECH switch-based environment sensor to a set of sensor contacts for monitoring by the Room Alert 26W unit. Any switch sensor device with a set of voltage-free dry contacts can be attached to a set of sensor contacts. AVTECH has many sensors available for monitoring environment and other conditions.
- I. **Expansion Port** — This port exists for future expansion. Do not connect any sensors or cables to this port until AVTECH releases or approves devices that are specifically designed to utilize this port.
- J. **Reset Button** — Press this button to reboot the Room Alert 26W unit. If the button is pressed and held for 5 seconds, the unit will reset to the factory default settings and reboot.
- K. **Main Power Port** — Connect the 'AVTECH 5v 1A Power Adapter' to this port to power the Room Alert 26W unit. Do not use any other power adapter or it could damage the unit.

Step 1: Install The AVTECH Device Discovery Utility

The AVTECH Device Discovery Utility is used to initially discover the Room Alert 26W after it is connected to your network. The Device Discovery Utility can be installed from the AVTECH Update CD or downloaded from the 'Downloads' section of the AVTECH.com website. Install this utility on a Windows-based computer that is located on the same network that the Room Alert 26W unit will be connected to. Install this now and we will come back to the Device Discovery Utility in a later step.

Step 2: Install The Room Alert 26W ID Box



The Room Alert 26W must be connected in the following order for initial configuration and discovery on the network to be successful. Locate the Ethernet cable included with your package and connect one end to the 'Network' port on the front of the Room Alert 26W unit. Connect the other end of the Ethernet cable to an open port on the hub, switch or router that will give the Room Alert 26W unit access to your network.

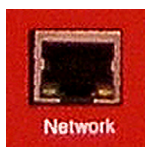
Next, locate the 'AVTECH 5v 1A Power Adapter' and plug it into a surge protected power source.

NOTE: The Room Alert 26W unit can be plugged into a UPS, however this will prevent the built-in power sensor from being able to detect a main power failure and send an immediate alert when that occurs.



Then, attach the other end of the power adapter to the 'Power' port on the Room Alert 26W unit only if the Room Alert 26W unit is already connected to the network. Be sure to remove the sticker over the 'Power' port before attaching the 'AVTECH 5v 1A Power Adapter' to the Room Alert 26W unit.

IMPORTANT NOTE: DO NOT CONNECT POWER to the Room Alert 26W unit during the initial setup UNTIL AFTER you have connected it to your network as described above or it will cause problems automatically assigning the initial IP address.



Once the network and power connections have been completed, verify that the LED located on the bottom-left side of the network jack lights up indicating power and network connectivity.

NOTE: The Room Alert 26W unit has a built-in battery backup system (i.e. UPS) that will keep the Room Alert 26W unit powered long enough to send an alert notification indicating power failure. To enable this, simply pull the plastic tab from the air vent on the left side of the unit so that the battery contact is enabled. There is no need to open the enclosure and doing so may void the warranty. Consult Technical Support before opening the Room Alert 26W ID box.

Next, remove the plastic pull tab, enabling the built-in UPS.

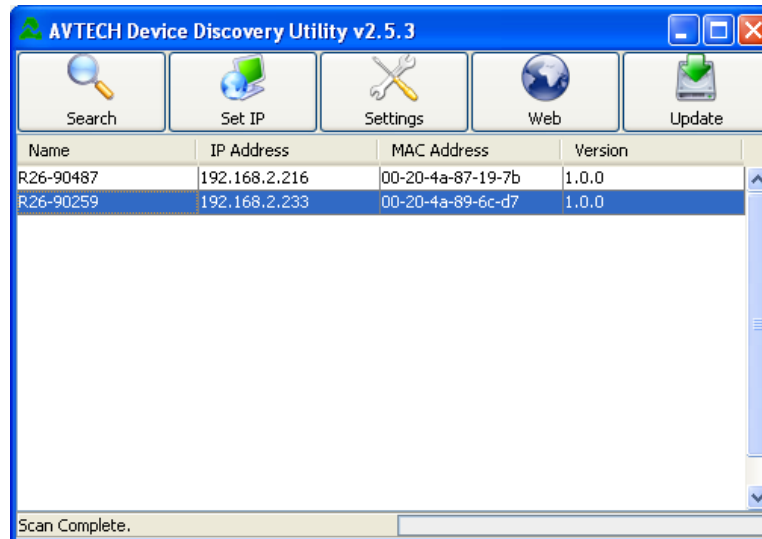
Step 3: Discovery And Network Settings

Once the Room Alert 26W unit has been properly installed according to Step 2 above, open the AVTECH Device Discovery Utility and click the 'Search' button. The AVTECH Device Discovery

Utility will attempt to discover the Room Alert 26W unit connected to your network by sending out a UDP broadcast on UDP port 30718.

NOTE: If there are multiple Ethernet adapters on the computer that the AVTECH Device Discovery Utility is installed on, a dialog will display asking for the proper network to perform the search on. Make the correct selection and then continue.

The Room Alert 26W unit is initially set to obtain an IP address automatically using DHCP. If you do not have DHCP on your network, please see the 'Static-Only Networks' section below.



The Room Alert 26W unit connected to your network should appear in the AVTECH Device Discovery Utility window as illustrated above. This will normally take just a few seconds. If the IP address displayed is '169.xxx.xxx.xxx' and the 'Name' is displayed as 'Unknown' or if the Room Alert 26W unit was not found, please see the 'Device Not Found Or Invalid IP Address' subsection below before continuing.

Once the desired Room Alert 26W unit is displayed, select it from the list to perform an action on it. Selecting multiple units will cause the action selected to be performed on multiple units (i.e. all selected units) simultaneously.



Set IP

The '**Set IP**' button is used to assign a static IP address, gateway IP address, subnet mask and DNS server IP address or to set the Room Alert 26W unit back to DHCP (0.0.0.0). If the 'Set IP' button is pressed without a specific Room Alert 26W unit selected in the AVTECH Device Discovery Utility, a prompt will display asking for the MAC address of the unit. This option can be used in conjunction with the MAC address listed on the bottom of the Room Alert 26W unit to attempt IP address assignment of a unit that cannot be located or has previously been obtained or assigned an incorrect IP address.

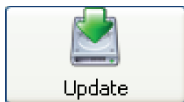


Settings

The '**Settings**' button opens the default web browser and displays the 'Settings' screen of the Room Alert 26W web interface. The 'Settings' screen allows for further configuration of the Room Alert 26W unit and is where alerts, email, SNMP and other settings are configured.

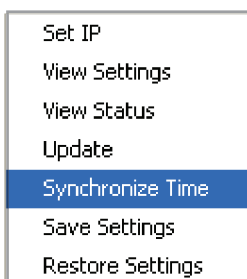


The **‘Web’** button displays the main ‘Status’ screen of the Room Alert 26W web interface which shows current sensor data and alarm status in the default web browser for the system you are using. Be sure to bookmark the link that loads for quick and easy reference in the future.

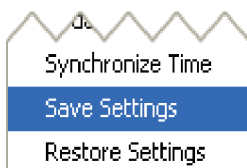


The **‘Update’** button initiates the firmware upgrade process of the AVTECH Device Discovery Utility. If a Room Alert 26W unit is not selected before left clicking this button, a dialog will display asking for the IP address of the unit to upload firmware to. Please see the ‘Upgrading Firmware’ section of the ‘Advanced Topics’ chapter for important instructions on the ‘Update’ feature.

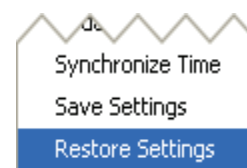
The AVTECH Device Discovery Utility offers additional features accessible via a right click context menu. This menu is accessible only when a located Room Alert 26W unit has been selected and the right mouse button has been clicked. These menu options are described below.



The **‘Synchronize Time’** option instructs the Room Alert 26W unit to synchronize with the time server specified in the ‘Time Server IP’ field on the ‘Advanced’ tab of the ‘Settings’ screen. The time displayed on the Room Alert 26W ‘Status’ screen and included in email alert notifications can only be updated by linking with a network time server (NTP) on UDP port 123. If a time server is not available on your network and access to a time server on the internet is not possible, Microsoft has various help files available that explain how to configure a computer on the local network to act as a time server for other devices. Visit Microsoft.com to learn more or see AVTECH’s Frequently Asked Questions (FAQs).



The **‘Save Settings’** feature can be used to download the current configuration settings on a Room Alert 26W unit for backup purposes. This feature can also be used to quickly configure multiple Room Alert 26W units by configuring one unit, selecting it, clicking the ‘Save Settings’ option, then selecting multiple units and clicking the ‘Restore Settings’ option.



The **‘Restore Settings’** feature is used to restore a saved configuration created using the ‘Save Settings’ feature to one or multiple Room Alert 26W units. When selected, the user will need to select from a previously saved ‘.bak’ file located in the ‘log’ folder of the ‘AVTECH Device Discovery Utility’ directory in order to restore or update the settings on the Room Alert 26W unit(s).

Static-Only Networks

If the network that the Room Alert 26W unit will be connected to does not have automatic DHCP IP address assignment, the Room Alert 26W unit will default to a ‘169.xxx.xxx.xxx’ IP address. The AVTECH Device Discovery may or may not be able to discover your unit when it has obtained a ‘169 xxx.xxx.xxx’ IP address, depending on various network conditions. Follow the steps below to assign an IP address to the Room Alert 26W unit that will be appropriate for your network.

1. Restart the AVTECH Device Discovery Utility and click the 'Set IP' button.
2. Click 'Ok' on the first dialog that displays and enter the Room Alert 26W MAC address when prompted. The MAC address is listed on the label located on the bottom of the Room Alert 26W.
3. Enter a valid static IP address for the current location of the Room Alert 26W unit when prompted.

NOTE: If the Room Alert 26W unit is later relocated outside of the current subnet, you will need to reset the IP address in order to see and work with the Room Alert 26W unit.

If the Room Alert 26W unit is still not discovered or the IP address is not updated, continue with steps 4-6.

4. Locate a cross-over Ethernet cable or spare hub and connect it to the computer being used. Connect the Room Alert 26W to the other end of the cross-over Ethernet cable or directly to the hub.
5. Assign static IP settings to the computer being used. If the 'Search' button is pressed after doing so, the Room Alert 26W unit should be discoverable. If it is not, be sure that there are no applications on the computer being used that are blocking traffic sent to or from the AVTECH Device Discovery Utility (i.e. software firewalls, anti-virus applications, etc.)
6. Repeat steps 1-3 above although enter a static IP address in step 3 that has the same first three octets as the static IP address assigned to the computer (i.e. IP address of computer: 192.168.2.3, IP address of Room Alert 26W: 192.168.2.4).

If the IP address of the Room Alert 26W unit is still not updated, continue with steps 7-9.

7. Assign static IP settings to the computer being used that match the IP address of the Room Alert 26W unit (i.e. IP address of Room Alert 26W: 169.254.10.122, IP address of computer: 169.254.10.123).
8. Click the 'Search' button in the AVTECH Device Discovery Utility and select the Room Alert 26W unit when discovered.
9. Click the 'Set IP' button and enter a valid IP address for the location on the network where the Room Alert 26W unit will be located. If the IP address does not update, access the 'Settings' screen of the Room Alert 26W unit and enter the IP address settings on the 'Network' tab. After doing so, click the 'Save Settings' button, wait 10 seconds and re-attach the Room Alert 26W unit to the network.

Device Not Found Or Invalid IP Address

If the Room Alert 26W is not discovered by the AVTECH Device Discovery Utility, the network may be blocking UDP broadcast packets on port 30718. Even if the Room Alert 26W obtains a valid IP address, this can prevent the Room Alert 26W unit from being discovered. To resolve this issue, check the DHCP server for the MAC address listed on the label located on the bottom of the Room Alert 26W unit. If this is not possible or if there is not an entry in the DHCP server, follow the instructions listed under the 'Static-Only Networks' subsection above.

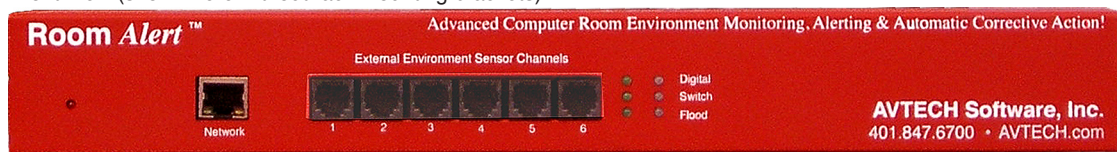
If the Room Alert 26W unit is discovered although has a '169.xxx.xxx.xxx' IP address, the Room Alert 26W unit may not have been connected properly or DHCP assignment may currently be getting blocked. In either case, follow the instructions listed in the 'Static-Only Networks' subsection above.

NOTE: If the instructions provided do not allow configuration of the Room Alert 26W unit, please initiate a Live Chat technical support request on AVTECH.com or send an email support request to Support@AVTECH.com.

Step 4: Connect Included Sensors And Accessories

The graphics below identify the connection ports and channels of the Room Alert 26W ID box that are visible on the front and rear panels. Use these to connect the appropriate sensors and accessories.

Front View (shown here without rack mounting brackets)

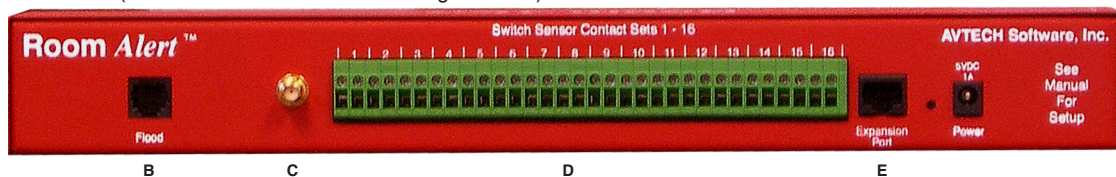


A

- A. **Digital Temperature Sensor** — Connect the included AVTECH Digital Temperature Sensor to one of the External Environment Sensor Channels shown above (A.). The Digital Temperature Sensor provides a real-time digital temperature reading at the location of the temperature probe. Position the sensor in the desired location, running the sensor cable back to the Room Alert 26W ID box. DO NOT remove the red plastic cap from the tip of the sensor.



Back View (shown here without rack mounting brackets)



- B. **Internal Flood Sensor** — The built-in AVTECH Flood Sensor on the Room Alert 26W unit can be used if an AVTECH Flood Sensor Cable has been purchased and attached to the Flood Sensor Cable Port. The Flood Sensor Cable includes an orange flood sensing cable and RJ-11 leader cable. Attach the orange flood sensing cable to the RJ-11 leader cable via the connection housing. Now, attach the RJ-11 leader cable to the 'Flood' port on the back of the Room Alert 26W unit (B.). Then, place the Flood Sensor Cable where water detection is desired or most likely to occur.
- C. **Wireless Antenna** — Connect the Wireless Antenna to the Antenna RPSMA Connector (C.) to enhance communication between the Room Alert 26W and WiSH Sensors that can be located up to approximately 250' away. Gently twist on the antenna and position it vertically (i.e. pointing up) for most applications.



- D. **WiSH Sensor** — The Wish Sensor is designed to communicate wirelessly with the Room Alert 26W unit via the wireless antenna. WiSH Sensors are best installed one at a time so that the serial number displayed in the ‘Status’ screen of the Room Alert 26W web interface can be recorded on the serial number sticker located on the back of the WiSH Sensor being configured. The WiSH Sensor has an internal Digital Temperature Sensor and can accommodate up to two AVTECH external digital sensors and one external switch sensor. Configure and test the WiSH Sensor, then position it in the desired location, somewhere within 250’ of the Room Alert 26W unit.



- E. **Room Entry Sensor** — Connect the AVTECH Room Entry Sensor to one of the Switch Sensor Contact Sets 1-16. Position the sensor in the desired location, running the sensor cable back to the Room Alert 26W ID box.



- F. **Expansion Port** — This port exists for future expansion. Do not connect any sensors or cables to this port until AVTECH releases or approves devices that are specifically designed to utilize this port.

Step 5: Check Room Alert 26W Firmware Version

Open the AVTECH Device Discovery Utility and click the ‘Search’ button. When the Room Alert 26W unit is located, select it and click the ‘Web’ button. If you are unable to locate your Room Alert 26W unit because UDP broadcast packets are blocked on your network, simply type the IP address of the Room Alert 26W unit in the location bar of a web browser.

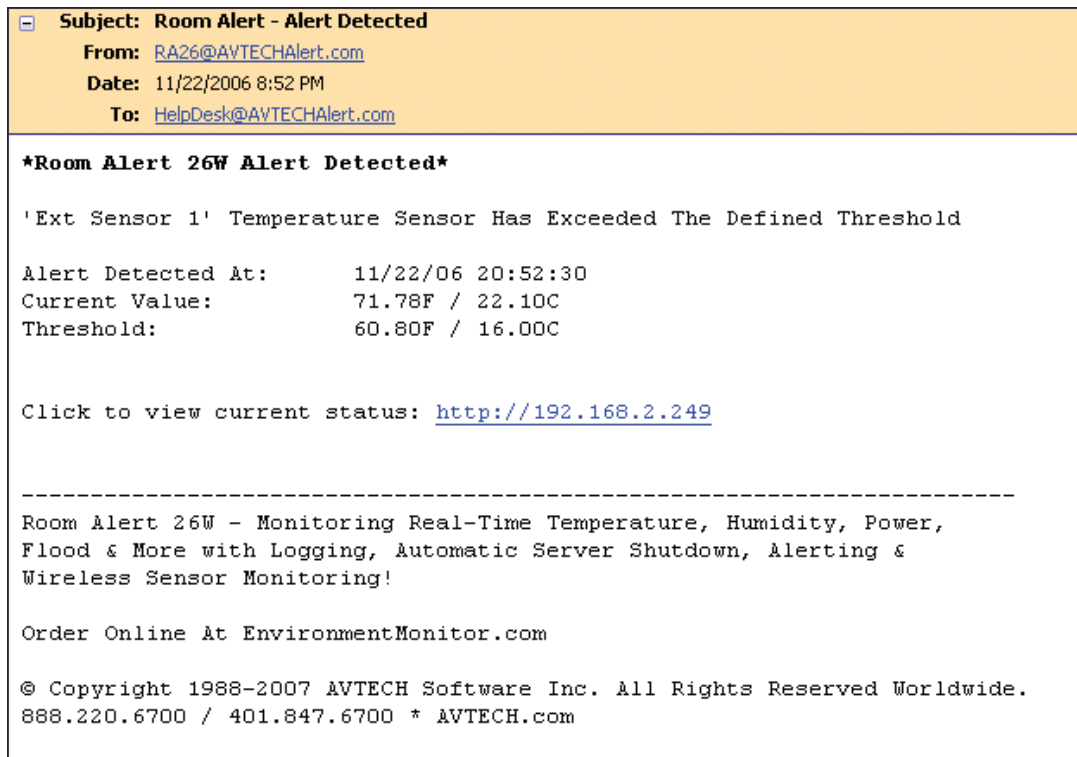
NOTE: If the ‘Status’ screen does not load sensor data, be sure that a proxy or Microsoft ISA (Internet Security and Acceleration) server is not blocking traffic to or from the Room Alert 26W unit.

After the ‘Status’ screen has loaded and is fully displayed, click the ‘Room Alert 26W vX.X.X’ link in the top right hand corner. If the pop-up that loads says a more current version is available, then follow the instructions in the ‘Upgrading Firmware’ section of the ‘Advanced Topics’ chapter of this manual.

Configuration And Setup Screens

Alert Methods

The Room Alert 26W unit can send alert notifications via email and email-to-SMS using anonymous SMTP relay and/or SNMP Traps. The Room Alert 26W unit is fully SNMP compliant and can be accessed by any application that can issue a SNMP Get request.



Email

Email alert notifications are configured in the Room Alert 26W web interface on the 'Email' tab of the 'Settings' screen. Email alert notifications from the Room Alert 26W unit are sent using anonymous SMTP relay. Be sure the mail server being used is configured to allow this type of connection.

Room Alert 26W Settings

Network | **Email** | SNMP | Security | Advanced | Internal | Digital 1 | Digital 2 | Digital 3

Room Alert can send email via SMTP to notify users of alerts. Multiple email recipients can be specified and the Return Address (From) defined. If multiple email recipients are specified, they must be separated by a comma (,) or semi-colon (;).

Enable Email Alerting ☒ Email Alerts Enabled

Mail Server Address

Email Recipients

Return Address (From)

Send Test Email

Requires Java Runtime Environment v1.4.2 or Later
Java.com

Initial Email Setup

First, check the 'Enable Email Alerting' checkbox and enter the domain name or IP address of the mail server being used in the 'Mail Server Address' field on the 'Email' tab. Next, enter the email addresses to be alerted in the 'Email Recipients' field. If more than one email address is entered, use a comma (,) or semi-colon (;) as the separator. Finally, enter an email address in the 'Return Address (From)' field for an account that resides on the mail server being used.

NOTE: If a domain name is entered in the 'Mail Server Address' field, the Room Alert 26W unit must be assigned static IP settings and have a DNS server IP address set.

Testing

A test email can be sent using the 'Send Test Email' button on the 'Email' tab. This button will automatically save any changes made to the 'Email' tab before sending a test email message. If the test email is not received, check with the mail server administrator in regards to the current SMTP relay settings. If anonymous SMTP relay messages are blocked, a mail server can usually be configured to allow anonymous SMTP relay messages from the IP address of the Room Alert 26W unit.

Email-To-SMS

Email alert notifications can be sent via Short Message Service (SMS) to computers, mobile phones, alphanumeric pagers and PDAs using SMS text messaging in addition to regular email. This functionality is widely supported by current mobile device service providers and is accomplished by sending email to an email address, formatted in a way defined by the service provider being used for the target mobile device.

For example, Verizon's email address format for sending an email alert to a mobile device using SMS text messaging is '<10 digit mobile device number>@vtext.com' with '<10 digit mobile device number>' being replaced by the area code and phone number of the mobile device without dashes, spaces or a '1' in front of the area code.

If the specific format for your service provider is not known, AVTECH provides a database in the 'Support' section of the AVTECH.com website that contains the email-to-SMS format for many available service providers. This is the largest database of this type on the web. However, if your service provider is not listed, please contact them by phone for the proper format and be sure that the mobile device being used has text messaging capability enabled. If you learn of a new or changed format, please email this with your contact information to Support@AVTECH.com so we may confirm it and post it online for the convenience of other users.

SNMP

The Room Alert 26W unit is fully SNMP compliant and can be monitored by applications capable of performing an SNMP Query or Get request. The Room Alert 26W unit can also be configured to send SNMP Traps to up to three separate IP addresses when thresholds are exceeded. If another application is used to monitor the Room Alert 26W unit, be sure to obtain the MIB files for the Room Alert 26W unit from the 'Downloads' section of the AVTECH.com website or the most recent AVTECH Update CD.

Room Alert 26W Settings

Network Email **SNMP** Security Advanced Internal Digital 1 Digital 2 Digital 3

Room Alert can respond to a SNMP Query or Get request from network monitoring programs such as Pager Enterprise and also send SNMP Traps.

SNMP Read Community Name

SNMP Trap Recipient 1

SNMP Trap Recipient 2

SNMP Trap Recipient 3

Requires Java Runtime Environment v1.4.2 or Later
Java.com

SNMP Queries (SNMP Get)

SNMP Queries or Get requests are performed by a SNMP enabled software application to retrieve specific information from an SNMP compliant device on the network. The query or request will be sent to the IP address of the Room Alert 26W unit using a SNMP community name on UDP port 161. The SNMP community name in use for that device or network must match the name in the 'SNMP Read Community Name' field on the 'SNMP' tab of the 'Settings' screen. If use of a third party application is desired, the SNMP protocol used must be version 1 and the MIB files for the Room Alert 26W unit must be loaded properly in the software application in order to retrieve the SNMP MIB Objects that will return sensor data from the Room Alert 26W unit to the monitoring software.

SNMP Traps

SNMP Traps are sent from an SNMP compliant device on the network and received by a SNMP enabled software application capable of receiving SNMP Traps. To configure the Room Alert 26W unit to send SNMP Traps to a specific IP address, enter the IP address in one of the three 'SNMP Trap Recipient' fields on the 'SNMP' tab. SNMP Traps sent from the Room Alert 26W unit are sent using an SNMP community name of 'public'. If use of a third party application is desired, be sure to load the Room Alert 26W MIB file or the information received in the SNMP Trap will not be translated.

Monitoring With Device ManageR

Device ManageR is a software application that is included with your Room Alert 26W monitoring solution. It is designed to enhance the monitoring capacity of your Room Alert and/or TemPageR device(s). Device ManageR gives you an ‘at a glance’ view of an unlimited number of Room Alert, TemPageR and AXIS cameras installed on your network. Device ManageR includes powerful features that allow for a much greater degree of flexibility and control over when alert notifications are sent and who receives them. These include; unlimited alerting of customizable alert and alert clear notifications to individuals and groups, hierarchies, dependencies and scheduling. It also allows for Actions on Alert/Alert clear conditions, can send Web URL requests, screenshots from AXIS cameras and more. Additional features include logging data from your units to an embedded database, graphing this data over time and the ability to export logged data to .csv format. All this is possible from a single installation, with no rules and no agents. Device ManageR is a significant benefit of the overall Room Alert 26W package. It can be used as your primary monitoring tool or in conjunction with other monitoring applications.

Alert Thresholds

In order for alert notifications to be sent via email or SNMP Trap, alert thresholds must be configured for the sensors attached to the Room Alert 26W unit. Alert thresholds are configured on the ‘Internal’, ‘Digital’, ‘Switch’ and ‘WiSH’ tabs of the ‘Settings’ screens. Current sensor status will be displayed on the ‘Status’ screen of the Room Alert 26W web interface. The status icon displayed will be a gray circle ‘○’ if a sensor is connected although an alert threshold is not set. If an alert threshold is set for a connected sensor and the sensor is not in an alarm state, the status icon displayed will be a green check ‘✔’. If the connected sensor is in an alarm state, the status icon displayed will be a red X ‘✖’.

Internal Sensors (Temperature/Humidity, Power & Flood)

Alert thresholds for the internal (built-in) sensors on the Room Alert 26W unit are configured using the ‘Internal’ tab of the ‘Settings’ screen. The internal Temperature/Humidity Sensor and the internal Power Sensor are available for use without any additional purchase. The internal Flood Sensor can only be used if an AVTECH Flood Sensor Cable is connected to this port.

Internal Temperature/Humidity Sensor

The field next to the ‘Internal Temp/Humidity’ label can be used to change the sensor label of the internal Temperature/Humidity Sensor. The high and low threshold values for both the temperature and humidity readings from the internal Temperature/Humidity Sensor are entered respectively in the ‘High’ and ‘Low’ columns. The proper temperature thresholds to enter will depend on the current temperature scale selected on the ‘Advanced’ tab. The humidity thresholds should be entered in percent Relative Humidity (%RH). If the temperature or humidity reading from the internal Temperature/Humidity Sensor differs from a known temperature or humidity at that location, the readings from the internal Temperature/Humidity Sensor can be calibrated using the ‘Adjust’ field. Temperature adjustments must be made in Celsius. Humidity adjustments must be made in percent Relative Humidity (%RH).

Room Alert 26W Settings

Network

Email

SNMP

Security

Advanced

Internal

Digital 1

Digital 2

Digital

This unit contains internal digital temperature, digital humidity, power and flood sensors.

Internal Temp/Humidity

Internal Sensor

High

Low

Adjust

Temperature Thresholds

80

0

0

Humidity Thresholds

60

40

0

Internal Power Sensor

Power Sensor

☒ Alarm On Power Loss

Internal Flood Sensor

Flood Sensor

☒ Alarm On Water Detection ☐ Alarm On Disconnection

Save Settings

Requires Java Runtime Environment v1.4.2 or Later

Java.com

Internal Power Sensor

The internal Power Sensor is enabled by checking the ‘Alarm On Power Loss’ checkbox. The Room Alert 26W unit has a built-in UPS and will remain on long enough to send an alert if a main power failure should occur. If you would like to change the sensor label for the internal Power Sensor, enter the new name in the field next to the ‘Power Sensor’ label.

Internal Flood Sensor

The internal Flood Sensor, as mentioned above, requires the purchase of an AVTECH Flood Sensor Cable. If a Flood Sensor Cable has been obtained and connected, the Room Alert 26W unit can be configured to monitor the sensor by checking the ‘Alarm On Water Detection’ checkbox. If receiving an alert notification on cable disconnect is also desired, be sure to check the ‘Alarm On Disconnection’ checkbox.

Digital Sensors

The alert thresholds for any attached digital sensors are entered in the ‘Digital #’ labels with ‘#’ representing the digital port number the sensor is connected to. The sensor label for that corresponding sensor can be updated in the field next to the ‘Digital Sensor’ label and the sensor type of the sensor will be displayed directly below it. High and low thresholds for the temperature and humidity (if the sensor is a Temperature/Humidity Sensor) are entered in the ‘High’ and ‘Low’ columns. Temperature thresholds must be entered in the temperature scale selected on the ‘Advanced’ tab. Humidity thresholds must be entered in percent Relative Humidity (%RH). If the sensor readings differ from a known temperature or humidity at the sensor location, they can be calibrated using the ‘Adjust’ column.

Room Alert 26W Settings

Advanced
Internal
Digital 1
Digital 2
Digital 3
Digital 4
Digital 5
Digital 6
Sw:

Alert thresholds can be specified and Room Alert will send an email alert (if configured) when the thresholds are exceeded. The sensor labels can be modified to describe the sensor location or purpose.

NOTE: Temperature thresholds are specified in the temperature scale selected on the Advanced tab. The Adjust (calibration) value is specified in Celsius (C). Humidity thresholds are specified in percent Relative Humidity (%RH).

Digital Sensor

Ext. Sensor 1

Sensor Type: Temp/Humidity

High
Low
Adjust

Temperature Thresholds

83
0
0

Humidity Thresholds

65
45
0

Save Settings

Requires Java Runtime Environment v1.4.2 or Later
Java.com

Digital sensors are those that provide real-time variable status values that can be used to obtain a more definitive understanding of a current sensor's status, allow products like Device ManageR to monitor at multiple thresholds and be logged for historical reference. These values are included within alert messages for a clearer understanding by recipients and used for trending or manipulation into graphs or charts via other applications. These sensors attach to various AVTECH hardware via RJ-11 cable to an external environment sensor channel. Current sensors providing real-time values include the AVTECH Digital Temperature Sensor, AVTECH Digital Humidity Sensor and AVTECH Digital Power Sensor.



Switch Sensors

Switch sensor alert thresholds are set using the 'Switch 1-8' and 'Switch 9-16' tabs. The appropriate sensor number to configure will be determined by the set of sensor contacts on the back of the Room Alert 26W unit that the corresponding sensor is connected to. The circuit or sensor state selected in the 'Alarm On' drop-down menu should be the circuit state that you wish alert notifications to be sent at. To determine the proper sensor state, connect the sensor to the Room Alert 26W unit and determine the current circuit state displayed on the 'Status' screen for that sensor. Enter the opposite sensor state in the 'Alarm On' drop-down menu for that sensor. If there is no sensor connected to a specific sensor channel, choose 'Disabled' from the 'Alarm On' drop-down menu.

Room Alert 26W Settings

Digital 1
Digital 2
Digital 3
Digital 4
Digital 5
Digital 6
Switch 1-8
Switch 9-16

Room Alert can be configured to monitor switch sensors and will send an email alert (if configured) when the switch sensor circuit state is opened or closed. The sensor labels can also be modified to describe the sensor location or purpose.

Sensor Type: Switch (8 Channels)	Alarm On
<input type="text" value="Switch Sen 1"/>	CLOSED ▼
<input type="text" value="Switch Sen 2"/>	OPEN ▼
<input type="text" value="Switch Sen 3"/>	CLOSED ▼
<input type="text" value="Switch Sen 4"/>	OPEN ▼
<input type="text" value="Switch Sen 5"/>	DISABLED ▼
<input type="text" value="Switch Sen 6"/>	DISABLED ▼
<input type="text" value="Switch Sen 7"/>	CLOSED ▼
<input type="text" value="Switch Sen 8"/>	CLOSED ▼

Requires Java Runtime Environment v1.4.2 or Later
Java.com

Switch sensors are those that provide real-time status information showing whether a sensor is ‘in’ or ‘out’ of an alert state. These sensors have an internal switch that is monitored to see if the switch is open/closed, on/off, make/break, etc. Sensor status can be logged for historical reference although this type of sensor does not allow threshold monitoring like digital sensors. Users can still turn the logged status information into graphs or charts via other applications. The most important benefits here are knowing what percentage of time a sensor is in an alert stage or what part of the day or year the associated conditions are most often experienced. Current switch sensors from AVTECH are presented below and in the following External Sensor Options chapter.



Smoke Sensor



Power Sensor



Flood Sensor



Motion Sensor



Sound, Light & Entry Sensor



Room Entry Sensor



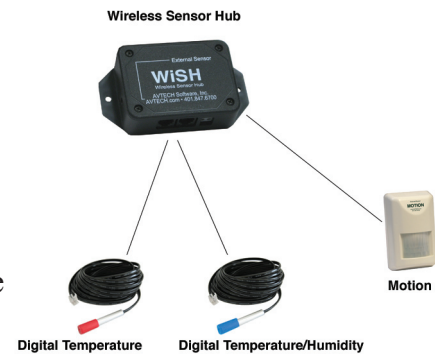
Air Flow Sensor



Panic Button

Wireless Sensor Hubs (WiSH)

The WiSH Sensor has a built-in Digital Temperature Sensor, two external environment sensor channels and one set of switch sensor contacts. The sensor label for the WiSH Sensor is modified using the 'WiSH Sensor' field. The internal Digital Temperature Sensor alert thresholds are modified on the 'Temperature' row under 'Internal Sensors' using the 'High' and 'Low' columns. The temperature scale used for alert thresholds must match the temperature scale selected on the 'Advanced' tab. If the reading received from the internal Digital Temperature Sensor is different from a known temperature at the sensor location, the reading can be calibrated using the 'Adjust' column. Setup for sensors connected to the environment sensor channels (digital sensor ports), switch sensor contacts and digital sensor ports is described in the appropriate sections above.



Room Alert 26W Settings							
Digital 4	Digital 5	Digital 6	Switch 1-8	Switch 9-16	WiSH 1	WiSH 2	WiSH 3
WiSH Sensor Wi-Sensor 2-1				Serial #: E7BFA8000000			
Internal Sensor: Temperature Thresholds				High Low Adjust 82 0 0			
External Sensors: Digital Sensor 1 Wi-Sensor 2-2				Sensor Type: Temperature High Low Adjust 80 0 0			
Humidity Thresholds 0 0 0							
Digital Sensor 2 Wi-Sensor 2-3				Sensor Type: Temp/Humidity High Low Adjust 85 0 0			
Humidity Thresholds 60 40 0							
Switch Sensor Wi-Sensor 2-4				Alarm On CLOSED			
<input type="button" value="Save Settings"/>							
Requires Java Runtime Environment v1.4.2 or Later Java.com							

External Sensor Options

Digital Temperature Sensor (TMP-SDT-SEN)



The AVTECH Digital Temperature Sensor provides a real-time digital temperature reading at the location of the temperature probe. The temperature range is from -67° to 257° Fahrenheit and/or -55° to 125° Celsius. Accuracy is within +/- 0.5 degrees. This is an instant 'plug & play' sensor that connects to one of the external environment sensor channels via an RJ-11 cable.

Digital Temperature/Humidity Sensor (RMA-DTH-SEN)



The AVTECH Digital Temperature/Humidity Sensor provides a real-time digital temperature and digital humidity reading at the location of the sensor probe. The temperature range is from -67° to 257° Fahrenheit and/or -55° to 125° Celsius. Accuracy is within +/- 0.5 degrees. The humidity range is from 0 to 100 percent Relative Humidity (%RH). Accuracy is within +/- 3.5%. This is an instant 'plug & play' sensor that connects to one of the external environment sensor channels via an RJ-11 cable.

Digital Power Sensor (RMA-PS2-SEN)



The AVTECH Digital Power Sensor allows real-time voltage, amperage, wattage and overall power consumption readings for the device plugged into it. Alerts can be initiated based upon consumption levels. This is an instant 'plug & play' sensor that connects to one of the external environment sensor channels via an RJ-11 cable.

Flood Sensor (RMA-F008-SEN, RMA-F024-SEN)



The AVTECH Flood Sensor is available with a standard 8' or 24' flood sensor cable and allows a real-time notification of flood or water leakage wherever the attached flood sensor cable is located. This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

Sound, Light & Entry Sensor (RMA-SLE-SEN)



The AVTECH Sound, Light & Entry Sensor allows real-time monitoring for sound and light at the location of the sensor. This sensor also includes a set of switch sensor contacts and an AVTECH Room Entry Sensor. Each sensor can be monitored independently or an 'any sensor' contact set allows all sensors to be monitored via a single cable. Any switch sensor can be attached to the switch sensor contacts. This is an instant 'plug & play' sensor that connects to one or more of the switch sensor contact sets via a low voltage 2-wire cable.

**Motion Sensor (RMA-MOT-SEN)**

The AVTECH Motion Sensor allows a real-time notification of movement through a zone or across a path. This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

**Power Sensor (RMA-PS1-SEN)**

The AVTECH Power Sensor allows a real-time notification of main power status change (i.e. power going on or off). This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

**Smoke Sensor (RMA-SS1-SEN)**

The AVTECH Smoke Sensor allows a real-time notification of the presence of smoke or fire. This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

**Air Flow Sensor (RMA-AF1-SEN)**

The AVTECH Air Flow Sensor allows a real-time notification of air flow status change (i.e. air flow going on or off). This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

**Room Entry Sensor (RMA-RE1-SEN)**

The AVTECH Room Entry Sensor allows a real-time notification of door or cabinet entry (i.e. door opening or closing). This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

**Panic Button (RMA-PB1-SEN)**

The AVTECH Panic Button provides the ability to initiate a real-time notification to others via the push of a button. This is an instant 'plug & play' sensor that connects to one of the switch sensor contact sets via a low voltage 2-wire cable.

Dry Contacts

Any non-voltage, dry contact sensor can be connected to provide an immediate alert when the sensor or device changes status to go on/off, make/break, open/close. This creates an instant 'plug & play' sensor when connected to one of the switch sensor contact sets via a low voltage 2-wire cable.

Additional Screens And Interfaces

Network

The 'Network' tab of the Room Alert 26W 'Settings' screen is used to update the network settings of the Room Alert 26W unit. The network settings can also be updated using the AVTECH Device Discovery Utility. To configure the Room Alert 26W unit to obtain an IP address automatically using DHCP, check the 'Use DHCP' checkbox and click the 'Save Settings' button. To configure the unit with a static IP address, uncheck the 'Use DHCP' checkbox, enter the new static IP address, gateway IP address, DNS server IP address, and subnet mask in the appropriate fields and click the 'Save Settings' button.

NOTE: If configuring static IP settings on the Room Alert 26W unit, be sure that the settings assigned are valid for the current location of the Room Alert 26W unit and that there are no other devices assigned to the same IP address. **DO NOT** set an IP address that is outside of your subnet or you may not be able to see or discover the Room Alert 26W unit.

Room Alert 26W Settings

Network | Email | SNMP | Security | Advanced | Internal | Digital 1 | Digital 2 | Digital | >

Room Alert can use a custom name for DHCP. This allows users to label a specific location as the DHCP name, making it easier to uniquely identify multiple Room Alert units on the network.

NOTE: The DHCP Name is limited to 16 characters. If a static IP address has been set, the Gateway, DNS Server and Subnet Mask can be set.

DHCP Name:

Use DHCP: ☐

IP Address:

Gateway IP:

DNS Server IP:

Subnet Mask:

Requires Java Runtime Environment v1.4.2 or Later
java.com

Room Alert 26W Settings

Network | Email | SNMP | Security | Advanced | Internal | Digital 1 | Digital 2 | Digital | >

Room Alert can prompt for a password before displaying the Settings interface. Enter a password below to enable the password prompt. Leaving the field blank will display the Settings interface without a password prompt.

NOTE: Be sure to keep a record of this password in a safe place.

IMPORTANT: Only alphanumeric characters are supported. Special characters are not supported.

Web Password:

Password Confirm:

Requires Java Runtime Environment v1.4.2 or Later
java.com

Security

The 'Security' tab of the Room Alert 26W 'Settings' screen is used to configure a password for entry to the Room Alert 26W 'Settings' screen. Be sure that the password entered contains only alphanumeric characters, special characters are not supported. Enter the password again in the second field for verification and click the 'Save Settings' button.

Advanced

The 'Advanced' tab of the Room Alert 26W 'Settings' screen is used to configure the temperature scale, time zone, daylight savings time setting, time server IP address and can reset the Room Alert 26W unit to factory defaults. The temperature scale selected in the 'Temperature Scale' drop down will be the default temperature scale to be used when entering alert thresholds and displayed on the 'Status' screen. The 'Time Server IP' field, if modified, must contain the IP address of an accessible NTP time server. If the 'Reset Factory Defaults' button is used to reset the Room Alert 26W unit to factory defaults, be sure to close the web browser after clicking the button and use the AVTECH Device Discovery Utility to locate the Room Alert 26W unit.

Room Alert 26W Settings

Network

Email

SNMP

Security

Advanced

Internal

Digital 1

Digital 2

Digital 3

Room Alert can report temperature data in Fahrenheit and/or Celsius. Use the drop down menu below to choose the desired temperature scale. Click the 'Reset Factory Defaults' button below to reset your device to the factory default settings.

NOTE: 'Reset Factory Defaults' will erase any existing settings.

Temperature Scale Fahrenheit

Time Zone (GMT-5:00) Eastern Time (US & Canada)

Daylight Saving Time ☒ Adjust for Daylight Saving Time (+1 hr)

Time Server IP

Reset To Defaults Reset Factory Defaults

(Resetting Factory Defaults will erase any existing settings.)

Save Settings

Requires Java Runtime Environment v1.4.2 or Later
[Java.com](http://java.com)

Room Alert 26W Help

Room Alert 26W

Firmware v1.0.0


Released 27 November 2008

[Click Here To Check For Updates](#)

Support Resources

[User's Guide & Reference Manual](#)
[Frequently Asked Questions](#)
[Application Notes](#)
[Support Center](#)
[Downloads](#)

Live Chat



Email Support

Support@AVTECH.com

Phone Support

888.220.6700 (USA & Canada)
401.847.6700 (International)
Mon-Fri 9 AM - 5 PM EST

Help

The Room Alert 26W 'Help' screen provides links to online support and information resources for the Room Alert 26W as well as information regarding telephone and email support. Directly below the 'Room Alert 26W Help' heading will be the current firmware version that is installed on the Room Alert 26W unit and its release date. The link entitled 'Click Here To Check For Updates' can be used to check if the firmware version installed on the Room Alert 26W unit is the most current (requires internet access). The additional support information provided on this screen is presented in the order that it should be followed in the event that you have a technical question regarding the Room Alert 26W or if you are experiencing a situation where assistance is desired.

About

The Room Alert 26W 'About' screen provides general links and contact information for AVTECH Software sales, support and websites. The firmware version that is currently installed on the Room Alert 26W unit will also be listed with the date released directly below. The link entitled 'Click Here To Check

For Updates' can be used to check if the firmware version installed on the Room Alert 26W unit is the most current (requires internet access).

About Room Alert 26W	
Room Alert 26W	
Firmware v1.0.0 Released 27 November 2008 Click Here To Check For Updates	
Sales	Order Online Quote Request Sales@AVTECH.com 888.220.6700 (USA & Canada) 401.847.6700 (International)
Support	Support Home User's Guide & Reference Manual Monitor With PageR Enterprise Support@AVTECH.com 888.220.6700 (USA & Canada) 401.847.6700 (International)
Website	AVTECH.com RoomAlert.com EnvironmentMonitor.com

Web Interface

The Room Alert 26W web interface can be used to view current sensor status on the Room Alert 26W unit. The web interface is accessed by selecting the Room Alert 26W unit in the AVTECH Device Discovery Utility and clicking the 'Web' button or by typing the IP address of the Room Alert 26W unit in the location bar of a web browser, once it has been installed properly on your network.

NOTE: If the 'Loading Sensor Data' indicator remains on the page, be sure that you do not have a proxy or Microsoft ISA server soliciting traffic and requests from the Room Alert 26W unit.

Directly below the menu bar on the Room Alert 26W is the DHCP name, screen name, date and time display.

NOTE: If the date displayed is '2/14/36', the Room Alert 26W is currently unable to connect to a time server. Please verify that the network has a connection to the internet and that NTP requests on UDP port 123 are not blocked. If the network does not have a connection to the internet or use of a local time server is desired, an IP address for a valid NTP time server can be entered in the 'Time Server IP' field on the 'Advanced' tab of the 'Settings' screen.

To the right of the date and time is the product name and firmware version number. This acts as a link that can be used to determine if the firmware version installed on the Room Alert 26W unit is the most current version. An internet connection is required for the firmware version check. The firmware is always current as of the time of shipment so there is seldom a need to upgrade shortly after purchase of the Room Alert 26W. The exception would be those occasions where a new version of the firmware has just coincidentally been released.

The next row contains a field that can be used to modify the refresh interval of the 'Status' screen and a pair of radio buttons for toggling between Fahrenheit and Celsius temperature displays. By default, the refresh interval for the 'Status' screen is set to every 60 seconds. To temporarily change this refresh interval, enter a number of seconds in the 'Update Every' field and click outside of the field. The default temperature scale displayed will correspond with the Fahrenheit or Celsius scale selected on the 'Advanced' tab of the 'Settings' screen.

Below these two rows is the sensor display area. The sections displayed from top to bottom are, 'Internal Sensors', 'Digital Sensors', 'Switch Sensors' and then 'Wireless Sensors'. Next to the sensor block name will be text indicating the number of sensors currently connected. The display for each sensor within the sensor block will contain the corresponding sensor label for that sensor, as well as a status icon indicating the current alert status and various other data. The status icon displayed will be a gray circle '○' if a sensor is connected although an alert threshold is not set. If an alert threshold is set for a connected sensor and the sensor is not in an alarm state, the status icon displayed will be a green check '✓'. If the connected sensor is in an alarm state, the status icon displayed will be a red X '✗'.

Room Alert TM Advanced Computer Room Environment Monitoring, Alerting & Automatic Corrective Action																											
Status	Settings	Help	About																								
R26-90512 - Current Sensor Status 11/22/06 20:41:47		Room Alert 26W v1.0.0																									
Update Every <input type="text" value="1"/> secs		Fahrenheit <input checked="" type="radio"/> Celsius <input type="radio"/>																									
Internal Sensors - 3 Installed																											
Internal 1: Temperature / Humidity <input type="radio"/> Internal Sensor <table border="1"> <tr> <td>Temperature</td> <td>High: 72.50 °F Low: 72.14 °F</td> </tr> <tr> <td>72.32 °F</td> <td></td> </tr> <tr> <td>Humidity</td> <td>High: 49.30 %RH Low: 48.96 %RH</td> </tr> <tr> <td>49.30 %RH</td> <td></td> </tr> </table>		Temperature	High: 72.50 °F Low: 72.14 °F	72.32 °F		Humidity	High: 49.30 %RH Low: 48.96 %RH	49.30 %RH		Internal 2: Power <input checked="" type="radio"/> Power Sensor Power State: Main Power Internal 3: Flood <input checked="" type="radio"/> Flood Sensor Cable: Not Connected Status: No Water Detected																	
Temperature	High: 72.50 °F Low: 72.14 °F																										
72.32 °F																											
Humidity	High: 49.30 %RH Low: 48.96 %RH																										
49.30 %RH																											
Digital Sensors - 4 out of 6 Connected																											
Channel 1: Temperature / Humidity <input checked="" type="radio"/> Ext Sensor 1 <table border="1"> <tr> <td>Temperature</td> <td>High: 71.96 °F Low: 71.42 °F</td> </tr> <tr> <td>71.78 °F</td> <td></td> </tr> <tr> <td>Humidity</td> <td>High: 40.80 %RH Low: 40.80 %RH</td> </tr> <tr> <td>40.80 %RH</td> <td></td> </tr> </table>	Temperature	High: 71.96 °F Low: 71.42 °F	71.78 °F		Humidity	High: 40.80 %RH Low: 40.80 %RH	40.80 %RH		Channel 2: Temperature <input checked="" type="radio"/> Ext Sensor 2 <table border="1"> <tr> <td>Temperature</td> <td>High: 71.15 °F Low: 71.02 °F</td> </tr> <tr> <td>71.15 °F</td> <td></td> </tr> </table>	Temperature	High: 71.15 °F Low: 71.02 °F	71.15 °F		Channel 3: Temperature / Humidity <input type="radio"/> Ext. Sensor 3 <table border="1"> <tr> <td>Temperature</td> <td>High: 71.96 °F Low: 71.42 °F</td> </tr> <tr> <td>71.78 °F</td> <td></td> </tr> <tr> <td>Humidity</td> <td>High: 40.46 %RH Low: 40.46 %RH</td> </tr> <tr> <td>40.46 %RH</td> <td></td> </tr> </table>	Temperature	High: 71.96 °F Low: 71.42 °F	71.78 °F		Humidity	High: 40.46 %RH Low: 40.46 %RH	40.46 %RH		Channel 4: Temperature <input type="radio"/> Ext. Sensor 4 <table border="1"> <tr> <td>Temperature</td> <td>High: 72.71 °F Low: 72.60 °F</td> </tr> <tr> <td>72.60 °F</td> <td></td> </tr> </table>	Temperature	High: 72.71 °F Low: 72.60 °F	72.60 °F	
Temperature	High: 71.96 °F Low: 71.42 °F																										
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40.46 %RH																											
Temperature	High: 72.71 °F Low: 72.60 °F																										
72.60 °F																											
Switch Sensors - 16 out of 16 Enabled																											
Channel 1: Switch	Channel 2: Switch	Channel 3: Switch	Channel 4: Switch																								

Advanced Topics

Upgrading Firmware

The Room Alert 26W firmware is upgraded using the AVTECH Device Discovery Utility and Room Alert 26W Firmware Update file. The latest version of these files can be obtained from the 'Downloads' section of the AVTECH.com website. If the AVTECH Device Discovery Utility is already installed on the computer that will be used for the upgrade, check for an updated version before downloading the Room Alert 26W Firmware Update file.

NOTE: When saving the Room Alert 26W Firmware Update file to the computer, it may be saved with either a '.zip' or '.upd' file extension. If the extension is '.zip', DO NOT EXTRACT the Room Alert 26W Firmware Update file.

After obtaining the most current version of the AVTECH Device Discovery Utility and the Room Alert 26W Firmware Update file, be sure to install the AVTECH Device Discovery Utility on the system that will be used to upgrade the Room Alert 26W firmware (if it is not already installed).

IMPORTANT NOTE: Be sure that there are NO WEB BROWSERS ACCESSING the Room Alert 26W unit from anywhere on your network before uploading the firmware as this could cause the firmware update to be incomplete or become corrupted.

When completed, open the AVTECH Device Discovery Utility and click the 'Search' button. When the Room Alert 26W unit is located, select it and click the 'Upgrade' button. If the unit can not be located although is accessible via a web browser, skip to the 'Unit Accessible Although Not Discoverable' section below. Navigate to the location where the Room Alert 26W Firmware Update file was saved, select it and click the 'Upload' button. A dialog will then load asking for confirmation of the firmware upload. Click 'Ok' to upload the Room Alert 26W Firmware Update file to the Room Alert 26W unit.

Unit Accessible Although Not Discoverable

In the event that the network blocks UDP broadcast packets on port 30718, the AVTECH Device Discovery Utility will not be able to locate the Room Alert 26W unit even though it is accessible via a web browser. As long as the Room Alert 26W unit can be accessed via a web browser, the AVTECH Device Discovery Utility should still be able to update the firmware on it. To do so, click the 'Upgrade' button in the AVTECH Device Discovery Utility without anything selected. Enter the IP address of the Room Alert 26W unit to be upgraded and click the 'Ok' button. Navigate to the location where the Room Alert 26W Firmware Update file was saved, select it and then click the 'Upload' button. A dialog will then load asking for confirmation of the firmware upload. Click 'Ok' to upload the Room Alert 26W Firmware Update file to the selected Room Alert 26W unit(s).

Performing A Firmware Recovery

If the Room Alert 26W unit is not accessible on the network, the Link LED (left LED on the network adapter) is unlit and the Activity LED (right LED on the network adapter) is blinking orange, the Room Alert 26W unit is currently requesting a firmware recovery. The AVTECH Device Discovery Utility is

capable of performing a firmware recovery in the event that this occurs. To begin the firmware recovery process, please complete the following steps:

1. Install the AVTECH Device Discovery Utility on a computer with a single Ethernet adapter.
2. Download the most current version of the Room Alert 26W Firmware Update file from the 'Downloads' section of the AVTECH.com website.
3. Connect the Room Alert 26W unit to this computer using a cross-over Ethernet cable and power on the Room Alert 26W unit.
4. Assign a static IP address to the computer being used and close or disable all software firewalls, anti-virus application and/or pop-up blockers.
5. Open the AVTECH Device Discovery Utility and press the reset button (the button next to power port on back of the Room Alert 26W unit).
6. A dialog will load explaining that a unit is requesting firmware recovery. Click 'Ok' and enter the MAC address printed on the label on the underside of the Room Alert 26W unit.
7. Follow the instructions that load to complete the firmware recovery process.

NOTE: If the Room Alert 26W unit is found to be in need of a firmware recovery, please notify AVTECH Support by Live Chat or email for a quick consultation. This may save you valuable time and effort or help you to determine what caused the situation so that it can be avoided in the future.





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