NETWORK INTERCOM SYSTEM
AN-8000 SERIES

Quickstart Guide

Thank you for purchasing AIPHONE's Network Intercom system.
Please carefully follow the instructions in this manual to install and troubleshoot this system.

Version 2 - 111909DM

AN Quickstart Guide Topics Overview

Section 1	Designing the System	*Setup a network the system will use to communicate*
Section 2	Equipment List	*Tell the software what hardware it will connect to*
Section 3	Setting Up Stations	*Configure master stations and door stations*
Section 4	Uploading and Testing	*Save and upload and verify desired functionality*
Section 5	Advanced: Call Forwarding	*Advanced settings on how to auto-forward calls to other masters*
	Advanced: Paging Zones	*Set up one way announcements to multiple stations and / or speakers*
	Advanced: Group Blocking	*Advanced settings on how to segment and restrict operator access*
	Advanced: Integration	*Background music, camera call up*
Section 6	Troubleshooting	*AN specific tips for solving common issues*
Appendix A	Web Interface Logs	*Log file event definitions*

Introduction

The AN-8000 system uses a network to connect intercoms and securely communicate. Most installations will communicate over a local area network, though some will involve VPN's or NAT over a wide area network. Several steps in the process can be very difficult or impossible at a customer's site using their network, for that reason this guide should be completed step-by-step up through the **Import from Scan Result step 2.2** before deploying the equipment to any network larger or more restricted than a single out of box switch.

The Example system pictured throughout the guide will communicate through a secure VPN between their Corporate Office and their Operations Center. The Example system will use the network subnet 192.168.1.X with a single AN exchange in one site that we will call the Operations Center and has chosen to locate their DVR, background music source, and a paging amp in their Corporate Headquarters. Their Operations Center houses the AN-8000EX and an AN-8000MS, AN-8011MS, AN-8020MS, AN-8050DS and a paging amp and their Corporate HQ has the AN-8500MS, AN-8540DS, and AN-8000MI.

If there were only an AN-8000EX a computer would be used to program it, and while it is possible to use a crossover cable, Aiphone recommends using a switch.

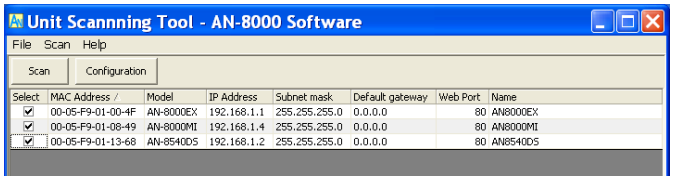
Section 1 Designing the System

Step 1.1 Use the Configuration Sheet to lay out the system. The network administrator will need to provide static IP addresses for each AN-8000EX, AN-8000MI, AN-8500MS and AN-8540DS. The customer, also referred to in this guide as 'operator', will need to specify which doors call which masters. Any Advanced features can be specified after the basics are completed through Step 4.2.

Step 1.2 Using the CD provided install the AN software on a computer that will be used to program the system. If the computer has multiple networking cards disable or otherwise turn off any that are not being used with the network connecting to the AN equipment. For the Network Interface Card that *is* being used, assign the IP address to 192.168.1.100 or any other available IP address between 2 and 250.

Step 1.3 Open the AN-8000 software and select New System **unless new equipment is being added to an existing system**. Click the OK button and the Main Menu opens with four options, Unit Scan, System Settings, Password Change and Clock Setting.

Step 1.4 From the Main Menu screen choose Unit Scan and when the Unit Scan window opens click the Scan button under the menu bar. When the scan completes and the equipment list appears, double click each address and change it to match what was given by the network administrator and press enter. When each line has a unique IP address, put a check in the box next on each line and click Configuration to save those settings to the equipment. When this finishes close the Unit Scan window and the program will go back to the Main Menu.

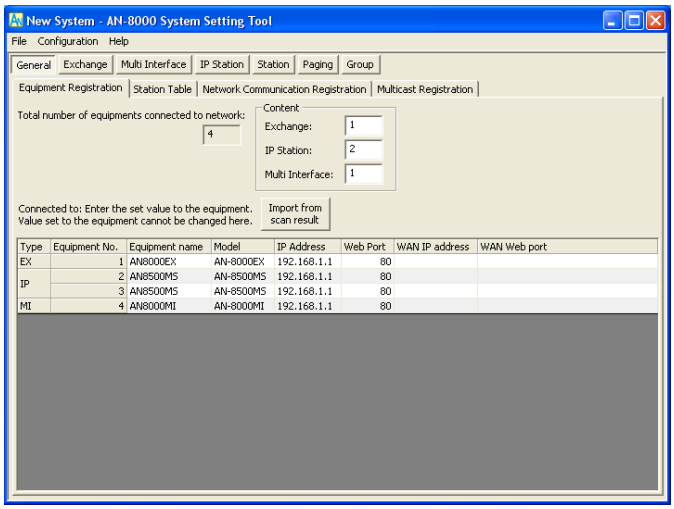


Note: Unit Scan uses an ARP request which will not use the WAN side of the router the computer is connected to because ARP is a Link Layer protocol and only operates on the local area network or a point-to-point link. It will not look beyond the switch the computer is connected to.

Section 2 Equipment List and Station Table

The Equipment Registration tab of the General section is used to tell the software which equipment the system will use.

Step 2.1 The *Content* section of the *Equipment Registration* tab must be filled out with the specified quantities of each type of AN equipment in the system so the software is aware of each part. Change each line in the Content section from 0 to the intended quantity and press enter and an Equipment No. row will appear at the bottom with a set of default settings.

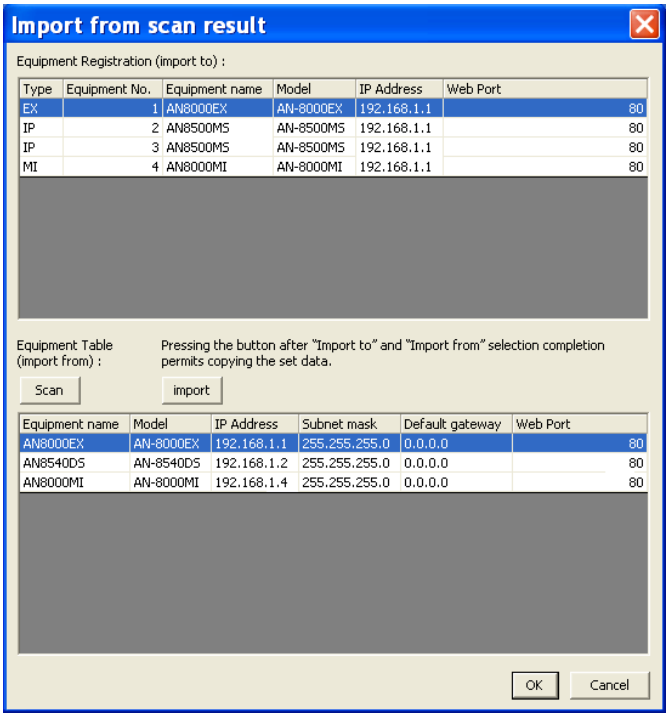


Note: If some stations are going to be added later it is a good idea to add them to the equipment list now. They can be quickly added to the system later using Unit Scan and Uploading the configuration settings.

Step 2.2 Import the IP Addresses for each Equipment No. using the Import from Scan Result button. When the window pops up, the default Equipment No. items from before will be at the top as well as a blank area on the bottom.

Click the "Scan" button and after it scans the result appears in the lower half of the window. One at a time select an item from the lower half (the desired settings) and an item from the top half (the default settings) and click Import so the software and the Unit Scan agree on the IP addresses. Click OK when finished to close the window.

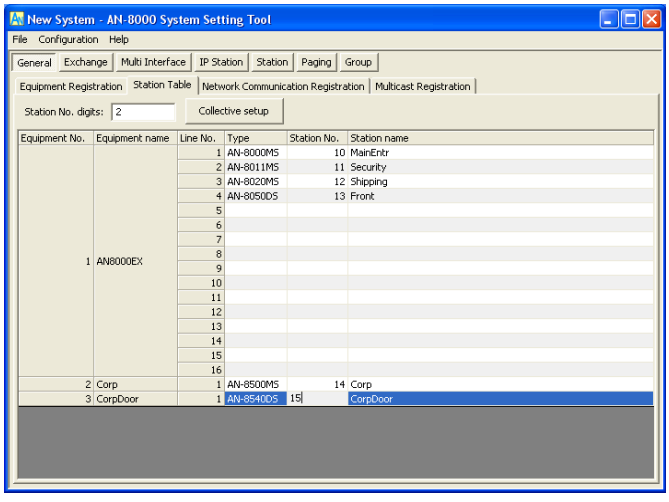
The Equipment list is now complete and **the hardware may even be deployed at this point** since the software knows every destination IP address for the system.



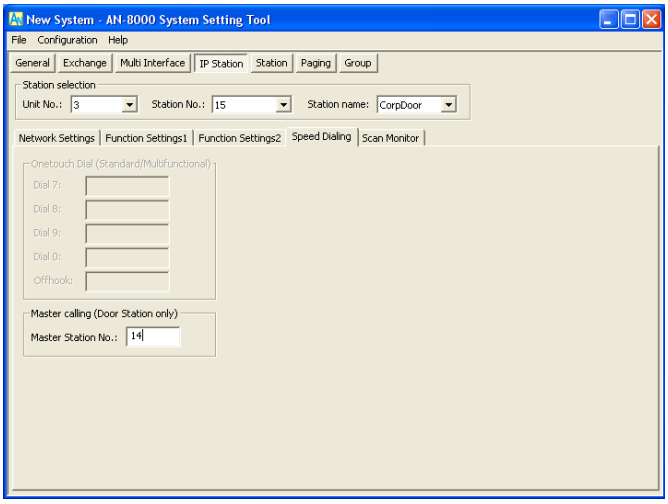
Note: The IP address can be manually entered in without using the Import from Scan Result window, but it is highly recommended to use Unit Scan to verify that the equipment is connected to the network, has unique IP addresses before going beyond this point, and to prevent problems when uploading for the first time. Be sure to press Enter after changing an IP address manually from the Equipment Registration tab, so the program accepts the change.

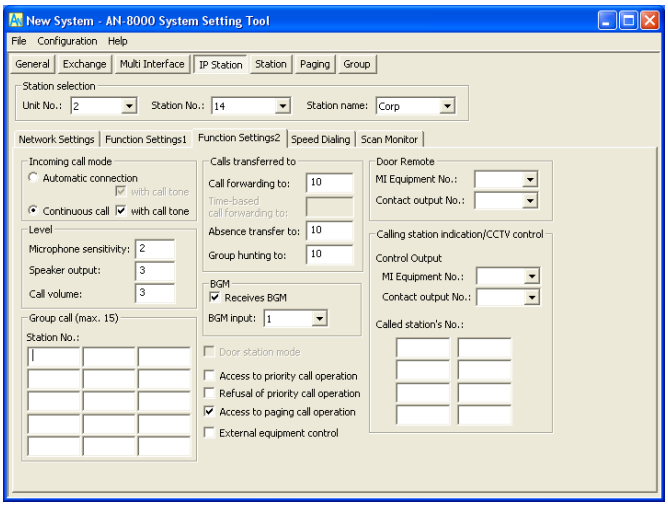
Step 2.3 Switch to the Station Table tab. If three or more digits are desired, change the Station No. digits field first and press Enter to accept. Fill out the Station No. column for each Line No. that will be used. To assign a Station No., double click on the field and the curser will appear. Enter the desired extension (refer to the Configuration Sheet if the user filled it out), then press Enter to accept.

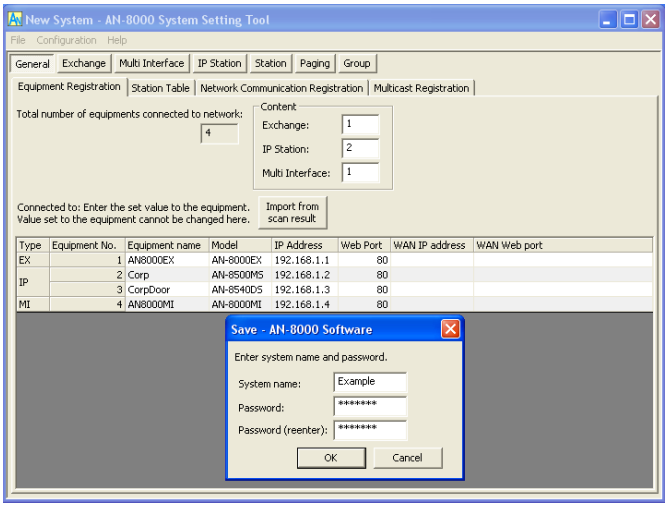
For every exchange, each Line Number (corresponding to the 16 ports on the back of each exchange) will also need to have the Type column filled out with the hardwired equipment, such as AN-8000MS or AN-8050DS selected from the drop down menu available when the Type field is selected.

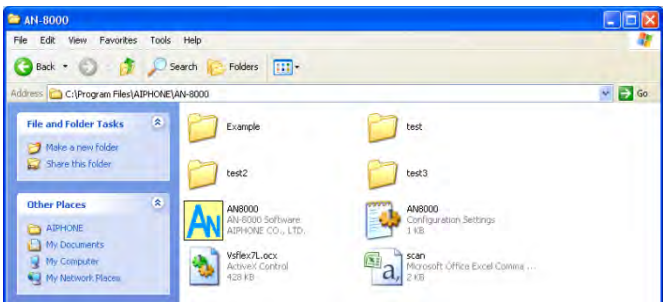


Note: When assigning extensions remember that there are speed dials that involve 0, 7, 8, 9, (and off hook) in addition to the eight Autodials located on some of the handsets, so no extension should start with 0, 7, 8 or 9 unless there is no plan to use those speed dials.









Section 3 Setting up Stations

Step 3.1 Setting up Door Stations

Door stations have a single call button that will Speed Dial a master when pressed.

Switch to the Station (or IP Station) tab and for every door station select the Station No. from the *Station selection* area at the top. Under the *Speed Dialing* tab there is a Master Station No. field, enter the master station's Station number that door station should speed dial.

> *Note on Door Release*: *To wire up door release, follow the diagram on page 113 or 118 section 3-25 or 3-30. Any master in communication with the door may press the key combination Transfer + Function + 0 to activate the open collector on the door station. No programming is necessary to enable this feature.*

Step 3.2 Setting up Master Stations

Master stations have many configuration settings, but the basics are *Incoming call mode* and *Group call*.

Switch to the Station (or IP Station) tab and for each master select the Station No. from the *Station selection* area. Under the Function Settings (or Function Settings2 for an IP master) change the *Incoming Call* mode to *Continuous Call*, which will allow the End User the option of taking the call when they are ready or just ignoring it.

Group call will allow other master stations to ring when this station is called by a door station or another master. Specify any masters that should also ring when this station is called.

Section 4 Uploading and Testing

This section covers saving the settings, uploading them to the equipment, and providing the settings and password to the customer.

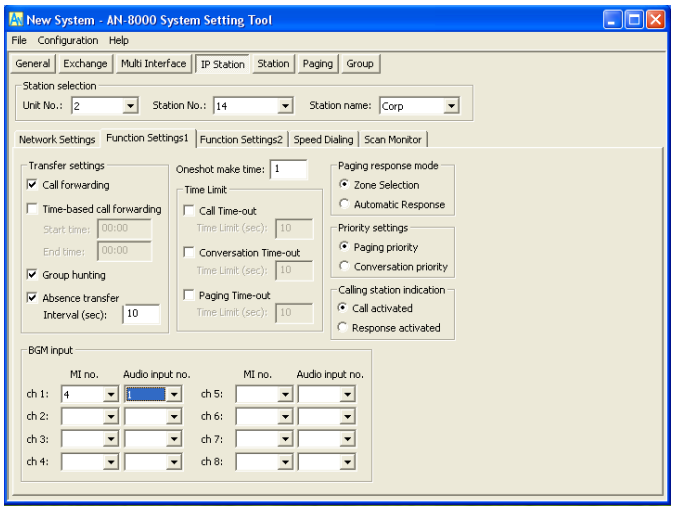
Step 4.1 Save the settings file in the default location inside the AN program folder. A dialog box will ask for a System name and a password.

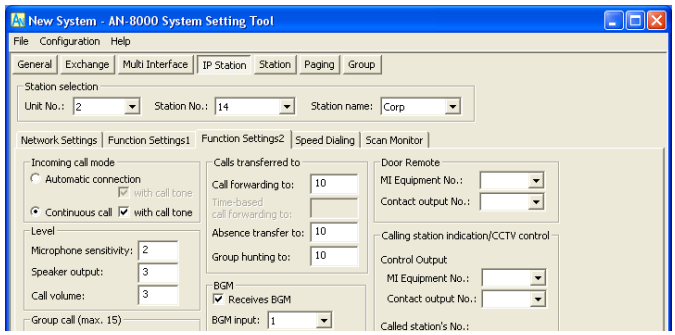
Step 4.2 Upload the settings to all devices by opening the Configuration drop down menu and choosing Upload. This will bring up a message box that says Uploading settings file as it attempts to upload to every Equipment No.

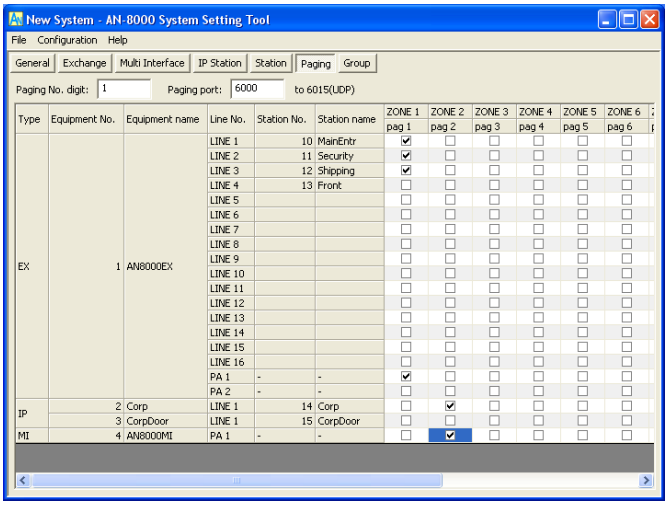
If any IP address reports that it failed to upload proceed to the troubleshooting section.

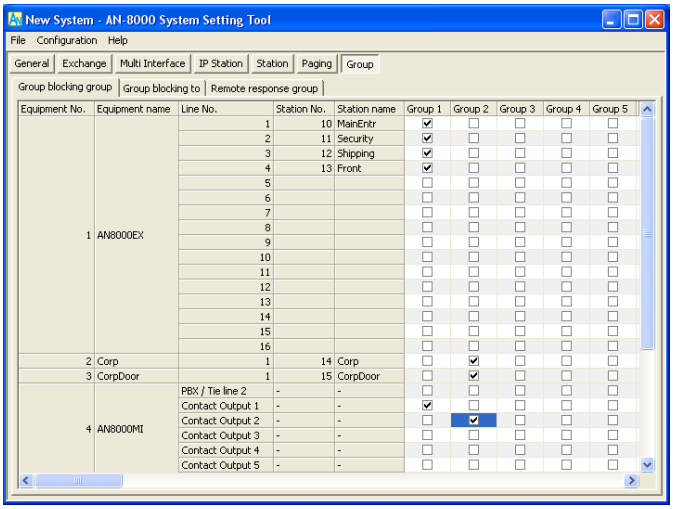
Step 4.3 Provide the system's folder with all configuration files and the password to the customer. By default, all AN configurations are saved in the folder C:\Program Files\AIPHONE\AN-8000\ and in a folder named for the System name given when the File->Save option is chosen from the System Settings menu or an upload is first attempted. This will also create .cfg files for each Equipment No. starting with 001.cfg.

Step 4.4 Test the system by pressing call buttons on door stations and answering at the master, and by dialing door stations and other masters. Proceed to Section 5 for advanced features or Section 6 for troubleshooting.









Section 5: Advanced

Step 5.1 Advanced: Call Forwarding

To set up automatic transferring and multiple masters getting a call, each feature must be enabled in the Exchange's Function Settings tab, or in Function Settings1 of an IP master and then specific assignments must be made in the called station's Function Settings(2) tab. There are 4 ways to forward an incoming call.

Call forwarding: This forwards the call immediately. The operator may assign masters on the fly using the key combination Function + 41 + # + (# / △), see page 66, or section 2-17.

Time-based call forwarding: Requires Call forwarding to be enabled. This will forward the call to the assigned station in the called station's Function Settings(2) tab during the hours specified.

> *Note: Each exchange will specify the hours for every device connected to that exchange, where multiple AN-8500MS stations will be able to specify different hours.*

Group hunting: This will forward the call to the assigned station when the called station is busy in conversation.

Absence transfer: This will forward the call to the assigned station after the interval specified (default is 10 seconds).

> *Note: A call's transfer can be "chained" by creative use of the transfer features. If a call is placed to Station 10 and Station 10 Absence transfers to 11, then Station 11 may also designate an Absence transfer of its own, even back to Station 10. Function Settings for the calling station will specify call timeout, if any.*

Step 5.2 Advanced: Paging Zones

To set up paging switch to the Paging tab and select the stations to be in Zone 1, Zone 2, and so on by adding check marks next to those stations. A paging zone can be stations like a Door station or Master station, a Paging amp, or a combination of them. Any master may initiate a page by pressing the Paging key then the zone #. Paging is used when the operator wants to make a one-way announcement to one or more stations and / or paging amps.

> *Note: Paging and calling are different features often confused with one another. Calling should be used for 2 way conversations, paging should be used for 1 way announcements.*

Step 5.3 Advanced: Group Blocking

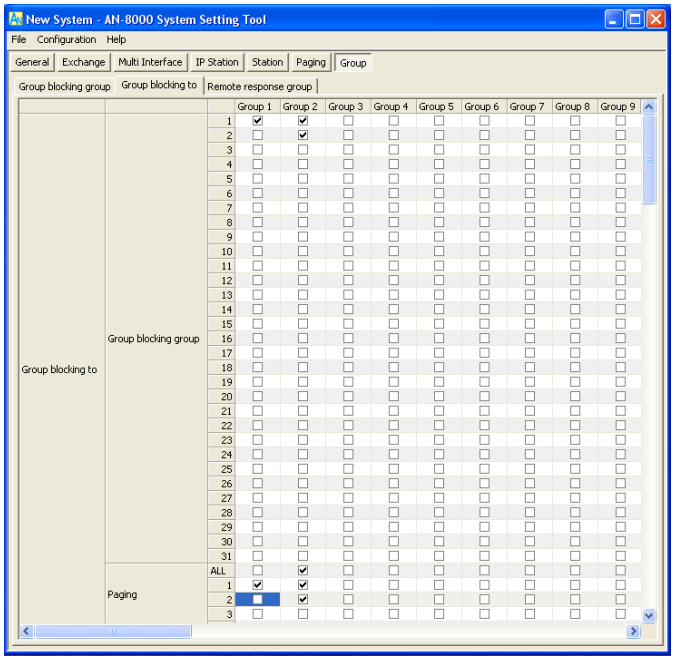
Group Blocking is used segment the system in ways that prevent certain stations from having access to some features or stations. This is important for applications where an emergency broadcast is needed but few stations should be able to initiate it, or when some departments should not be opening doors for other departments.

Fill out the "Group blocking groups" until the system is segmented as intended, with every station belonging to exactly one group out of the 31 possible groups.

In the "Group blocking to" tab, each column represents a segment of the system and the rows beneath it determine access to the other segments. The rule is a checked box *allows* an interaction from the Group column to the object row, a blank box *denies* that interaction. The reverse is not necessarily true, so Group 1 may be able to dial Group 2, but Group 2 would not be able to dial them back unless there is a check box next to 1 under the Group 2 column.

For Group 1, go down the list and check each box to enable that Group 1 to call that group. When finished with Group 1's permissions, move on to the next column and fill out Group 2's permissions in the same way. The All page can be enabled for a particular group, but each paging zone that would be part of that All Page must also be enabled.

"Remote response group" is a feature similar to Group call except the Remote response group members do not ring, but they may still take an incoming call by using the PTT key.

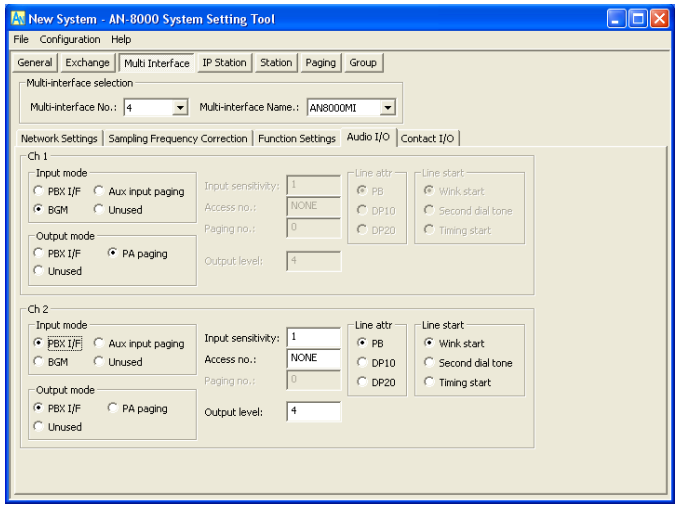


Step 5.4 Advanced: Integration

Background Music

The Multi Interface section of the program is used to set up extra paging zones, background music, camera call up, and what the Contact Inputs and Outputs are used for.

The Audio I/O tab can bring in a music source, enable auxiliary inputs for paging (such as an automated message) or background music, or to interface with a PBX. Once the background music is chosen for one of those 2 inputs, each Exchange or IP Master Function Settings(1) tab can specify up to 8 different MI channels, which involves an equipment number (AN-8000MI's are not named) and the input (1 or 2). Select the equipment number for the MI that has the BGM input, then select which of the 2 inputs on the MI it comes in on. Then go to the Function Settings for each Station (Function Settings2 if configuring an IP Station) and check the box next to Receives BGM and tell the station which BGM channel (1-8) it receives. To operate, a master can control its own channel by using the sequence Function + 1 + X (where X is 1-8 or 0 to turn it off).

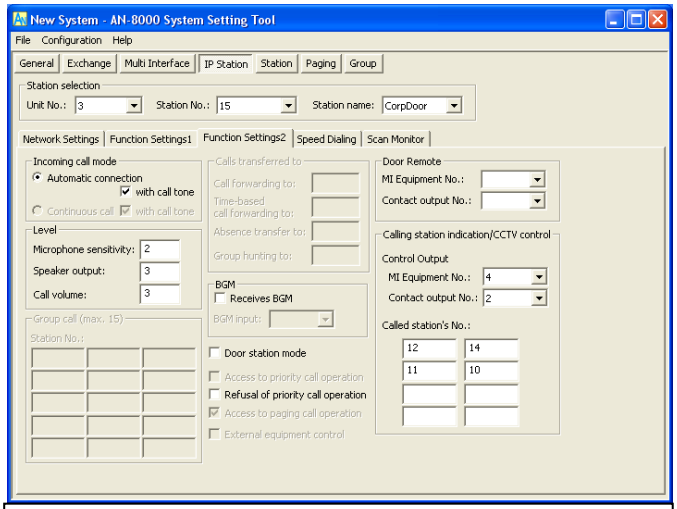


Note: In the example MI configuration channel 1 is for a BGM source and channel 2 is for a PBX connection.

Camera Call Up

For Camera call up, select the Station or IP Station from the *Station selection* box and switch to the *Function Settings* tab (or *Function Settings2*). In the *Calling station indication/CCTV control* box specify which *MI Equipment No*. and *Contact output No*. should provide a make contact when the station is called. To specify a make contact when this station calls another, up to 8 can be set by *Called station's No*.

Note: If the contact is being used for door release, you may specify the contact as such in the Door Remote field of a Station's Function Settings tab. This will enable the relay to fire during communication using the sequence Transfer + Function + 0 for any door. The system will only fire the relay for the door the operator is currently talking to.



Note: In the example, MI Equipment No 4 will fire the 2nd output when this station calls a master.

Section 6: Troubleshooting

The first step in troubleshooting an AN system is to operate it and find out what happens. If something unexpected or unintended happens then there are several features and tools available to find the cause of the problem, but the most important thing to do is to determine what happened and what was supposed to happen. Lights, sounds, the LCD display, the command line and web interface all give clues. This guide will first cover connecting, then calling, then communication.

Section 6.1 Network and Hardware Testing

Testing with Unrestricted Network Hardware

One of the best ways to troubleshoot a network problem is to recreate the network's IP settings on a consumer level router not connected over a WAN and attempt to use the equipment locally on what Aiphone calls a bench test; where all the equipment is in one place.

Do not use multiple 'smart' switches or routers for the initial setup and test, since Unit Scan's ARP request will not leave the first router and make the first real step impossible to complete. It is highly recommended to get the system through Unit Scan and through Import from Scan Result steps before taking it to a heavily restricted network.

Each router has a configuration page (contact the manufacturer for documentation), the only thing that might need adjusting is to tell it what the LAN's static IP address range will be. If the switch does not have a web interface or configuration page the switch will not interfere with any tests in this section.

Power Power over Ethernet is the preferred way to power AN-8540DS IP door stations or AN-8500MS IP master stations, although you can buy a select few plug in transformers if PoE is not available. Use a 12VDC power supply with a 2.1mm x 5.5mm barrel connector. Compatible models are: Mouser # 553-WDU12-1200, ELK Products Model P1216, Seco-Larm Model ST-1212-R1.0A, and the AD-1210P

The limitation with these sources is that they limit the distance the station can be from the power source and electrical outlet at about 5ft, which can be difficult for AN IP door stations located at a remote gate without power, which is why we recommend Power over Ethernet from PowerDsine see http://www.microsemi.com/powerdsine/ for more information.

Unit Scan Unit Scan is a useful tool that asks the LAN for any AN IP enabled equipment and will present the IP addresses as a response and allow changes to be made. If power is applied, all AN IP equipment should reply. The most common use of this test is to determine what the IP address of the equipment and determine what its Web interface port number is, by default it is 80. Once everything is plugged in to a network and powered on, go ahead and open the program and try a Unit Scan.

Ping Ping is used to test network connectivity between one computer and another. Any AN networked equipment with an ethernet port, such as an AN-8000EX, AN-8500MS, AN-8540DS, or AN-8000MI will respond to Ping just like a computer does. In Windows, the command window is used to ping another computer and is found by clicking the Start button, choosing Run… and then typing 'CMD' and then Enter. That will open the command window for DOS style command line operations. The command to ping is "ping 192.168.1.1" or whatever IP address the equipment may have.

Telnet Telnet can used to get a response from a computer on a particular port to see if the port is listening and responding for traffic or if a firewall is blocking it. An AN networked device will only respond to Telnet queries on ports and port ranges that it is programmed to. The default ports are a web port (80) and a TCP range from 5000-5003 used for dialing and connecting from one device to the next.

To test if there are problems with a particular port, use Telnet in the command line after a successful ping. The command is "telnet 192.168.1.1 5000" where 5000 is the port being tested. Telnet will, depending on the network, return with either an error or will simply show a blank screen with a flashing cursor. The flashing cursor means the computer is "in" and can send information to that port without it being blocked by a firewall. Close the window and check every other TCP port the system uses.

Next Step If Ping and Telnet are successful, the next test to try is in *The Web Interface*. If either test fails, take the equipment back to an isolated simple network using only a single switch, manufactured patch cables (not crossover), the computer, and the equipment without anything else on that test network, following the instructions in the section *Testing with Unrestricted Network Hardware* and repeat the tests.

Section 6.2 Configuration Testing

The Web Interface

A web browser like Internet Explorer or Firefox can be used to interact with the web interface of AN equipment. Initially the IP address is 192.168.1.1 (although it may have been changed in Unit Scan) and the default user name is *AN-8000* and the password is *guest*, both are case sensitive. Try the default user name and password, and then if that fails try the system name and password given in any previous upload attempt.

Once logged in there are Japanese or English language selection options and after chosen it navigates to /index-e.htm (-e for English). From the index page there are several menu options covered below.

Network Setting This menu is used to change the IP address, subnet mask, gateway and web port much like Unit Scan and is a useful way to remotely change the IP address since Unit Scan cannot be used remotely.

Operation Status This menu is used to see any active connections or conversations with other equipment, but it does not automatically refresh when something happens. Press the call button or dial an extension on the station you have open and see what the Operation Status page says. Test the opposite connection, instead of using the station to dial out to another, dial into it using another station and see what the Operation Status says.

Network Status Another way of testing the system is to use the Network Status menu and test a particular equipment's ability to communicate with every other AN IP address on the system, such as an AN-8000EX, AN IP doors or masters, or an AN-8000MI. If there are port forwarding problems, firewalls blocking ports or IP addresses this test will fail in some way and will help determine which segments of the network are not communicating with other segments, or if any equipment is having a connection or power related issue. This option is especially useful for testing across a Wide Area Network.

If any equipment fails a Network communication test open a browser and direct it to that address and it should ask for the system name and password. If it does not respond, proceed to Network Hardware testing.

Operation Log The Operation Log is probably the most useful menu in the web interface, and there is an entire Appendix devoted to definitions. It is helpful if all the clocks in the system match (see System Maintenance) so that reading the logs from AN equipment and the network used is much easier.

Stream Log The Stream Log will show if audio is travelling from one station to another. A typical minimum delay is 20ms and on a small network there will not be any lost packets. On the Stream Log page click the radio button next to Past to see how many packets travelled the network and what kind of delay and packet loss it is experiencing. If watching a live connection, hit the browser's refresh to get a snapshot at that moment.

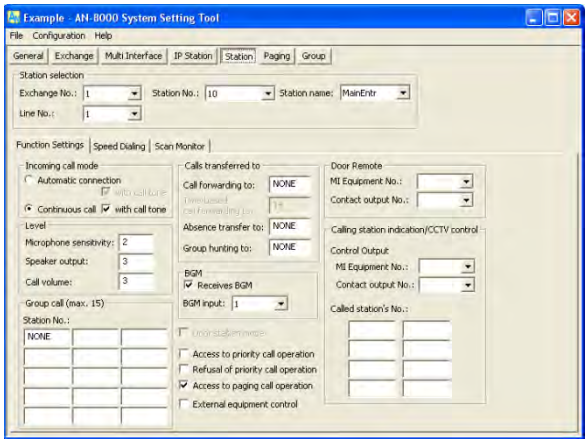
System Maintenance To reset to factory default settings from the System Maintenance page, click Delete All Settings and then Reset. This will also delete all configuration settings that associate it with a particular system. It will also reset the IP address to the initial 192.168.1.1 but will not change the web port to 80; that can only be done in Unit Scan.

If the browser does not ask for a user name and password, either the IP address is not correct, or the unit may have a connection or power problem. If it throws an error that the correct User Name or Password was not given, exhaust every combination possible before sending the equipment to the factory for a repair restore.

The System Maintenance page can also change the time, download or upload the settings file, or update the firmware.

Error Log The Error Log is not found in the menu. In the address bar of the browser change the word "index" to "error" and hit enter to load the Error Log page. The full address bar will read something like this: http://192.168.1.1/error-e.htm It is a simple page with only 4 links, the first link is the Error Log, the second will clear it, the third is the advanced Operation Log, and the fourth will clear the advanced Operation Log.

Section 6.3 Troubleshooting Calling



Notice the “grayed out” 14 in the disabled Time-based call forwarding to: field. A partially disabled feature or a conflicting forward or transfer can cause very strange problems like the one described above.

Also notice the NONE under Group Call, Call forwarding to, Absence Transfer to, and Group hunting to: fields. NONE indicates a station number was specified but then the station number was changed or deleted from the system.

In the web configuration view of the door station calling in, it will show that it is attempting to dial Line 225 whenever it dials Station 10 (Station 10 in this case is Equipment No. 1); which is strange because the no system has more than 80 Equipment No’s and each Equipment No. has no more than 16 Line No’s.

“Grayed out” Solution: When Time-based call forwarding to: was re-enabled, deleted the 14, then disabled again, then Group call should be able to function normally again.

“Invalid station number NONE” Solution: Any time a station needs to be removed from the system any and all references to it must be removed or configured to a new setting before the station is deleted from (All Station) in addition to every station for the entire system. Go through each Station No.: option from the drop down menu in the Station selection area for all Stations and IP Stations.

“The Call to Line 225” Solution: If the web configuration ever refers to a Line 225, there is an invalid setting in either the called station’s configuration or, more rarely, the calling station’s configuration.

Troubleshooting Communication

Sometimes over a network there will be voice drop outs after a connection has been made. There may be a delay between networks or a difference in timing for routers that can make communication lag. Sampling Frequency Correction (section 8-3 of the manual) covers a scenario where an exchange or an MI is located on a different network segment or across a WAN in which there may be slight discrepancies in time for each router between the networks. To correct for this, the Sampling Frequency Correction tab for one exchange or MI in each network must be designated as either the transmitter or receiver for this purpose. This is not required for the AN-8500MS nor the AN-8540DS and there is no Sampling Frequency Correction tab for those IP stations.

Voice operated exchange (VOX) problems in areas with loud ambient noise can interrupt the conversation and change the direction unintentionally. This could force a master in a loud area to be stuck transmitting this sound and never allowing the speaker to play the sound picked up by the door station’s microphone as the guest responds. Use the handset or force the conversation into Push to Talk (PTT) to see if this is a network bandwidth issue or a VOX issue. If operating the AN-8000MS try using he [# / ^] key or the [* / v] key to allow the master to being “Re-measuring” the background noise and attempt to compensate.

If the network has a lot of traffic there could be bandwidth related voice drop outs. The default High Quality Sound Transmission Mode setting for the Network Settings tab of each device uses 130kbps. Bandwidth Saving Transmission Mode will introduce a delay of 1/3 of second to the conversation and drops the bandwidth requirement to 50kbps to get around the problem of high traffic networks pushing the voice path to a lower priority (as defined in Quality of Service sections in some router configurations) when high priority traffic comes through. If the operators complain about voice drop outs during specific consistent times of the day, bandwidth narrowing may help.

Check the Stream Log of each device and see if there is an absence of traffic that might reveal a network problem that could be solved by setting up a router’s Quality of Service feature.

Troubleshooting Uploading

If any message appears asking for a System name and Password during an upload it usually means that if found AN equipment at that IP address but that the equipment has already been assigned to another AN System name and is asking for that System’s name and password. If any of the IP addresses are wrong, then the software will report that the upload to that IP address failed, although it will not indicate why. If the computer used to program the system is on another subnet that does not forward traffic, the upload will fail but not indicate why. Use the Web Interface and Network Troubleshooting pages for the equipment that fails.

Troubleshooting a Door Station

Every time the Call button is pressed it should make some kind of noise and the light should do something. Pressing the Call button and watching the light and listening to the ring tone will help narrow down a problem. The web interface can also simultaneously check the Operation Status for what the device (and the master it is attempting to Speed dial) is doing.

These are the most common events for the door:

1. A short single beep with a solid light for 5 seconds that means the Speed dial isn't set and in the Operation log this will appear as a "Speech path connection" followed by a "Speech path disconnection" 5 seconds later, and station number or line number will be the default 10.
2. A solid light for 5 seconds followed by a short beep means there is a network connection problem, in the Operation Log it will appear (under 'detail indication') "Command receiving Timeout". This will happen if there is a network problem such as the network cable unplugged, or when the IP address the station is dialing is not a part of the same system, such as when the web interface System name and Passwords are different.
3. A rapid series of beeps that means that it cannot connect to the station it is dialing, usually because the station it is attempting to dial has been disconnected from the network.
4. A ringback tone with solid light that means it is calling a station. In Door Call mode it will only ring once, otherwise it will ring until answered. If Continuous call tone is checked on the master it is Speed dialing, it will ring until answered. If Automatic Connection is on it will only ring once and then open a talk path. If both stations disable the checkbox With Tone it will silently open a talkpath.
5. An "on hold" two-tone falling and repeating, like during the master's Transfer + Function + 0 sequence or when the Hold button is pressed by the master it is in communication with. The Operation Log will log Call Hold and Remote Contact One-shot.
6. A repeating long beep, short pause busy tone with a solid light means the station being called is busy. Operation Log means "Called party busy". Note that it will ring through as soon as the station it is trying to call becomes available.

Troubleshooting a Master Station

Every button press should also have a sound that will accompany it. On the underside of the master there is a switch Ext Sp and Int Sp that will make the master silent in the Ext Sp position unless an external speaker is connected.

These are the most common events for the master:

1. The standby state is defined as when the system has power and connectivity, but is not doing anything, no dialing or paging or communication. In this state the LCD should read its Station Number and the time.
2. The indicator light flashes continuously while a call is received (Operation Log will then read Calling Start), and will go solid for the duration of communication (marked in Op Log by Conversation Start and Conversation End).
3. From the standby state, the LCD will read Dialing when the handset is lifted, and will also read Dialing if any digit or operation key is pressed with an accompanied sound.
4. A long tone, followed by the return to the normal display with the time and its own station number (10 will display as its station number if using factory default settings) means that the extension or paging zone dialed does not exist. In the Operation Log it will appear as a "Speech path connection" for as long as the handset is lifted, then log "Speech path disconnection".
5. A rapid series of tones means that the master has lost its connection to the network or the extension it is trying to reach has lost its connection.
6. A five second silence after dialing, followed by a long tone means there was a timeout in searching for the station dialed.

Next Step Use the settings file to find out which master a door is attempting to Speed Dial, then use that master to dial the door station's extension and see what happens. Use the browser if this test produces an error tone at the master, and check both devices' logs. Also do a connection test from either device to make sure they can connect to each other.

Appendix A: Web Interface Operation Log Definitions

Operation Log entry definitions

Normal entries:

"Speech path connection" means the station is being brought out of "standby" mode and into "operating" mode. It will tell you the station it is attempting to reach on the LCD display or on the Operation Log.

"Speech path disconnection" means the attempt to communicate is over and the station will return to its neutral "standby" state.

"Calling start" means there is a connection between the station and another station it is attempting to reach (in that order, the extensions will appear on the right).

"Conversation start" means that there is a conversation happening between the station and another station (extensions listed in that order).

"Conversation end" means the conversation is over.

"Called party busy" means that the station that is being called is occupied, the call will give busy tone until they become available and then the call will ring through.

"Call hold" means the station is on hold, this happens as soon as Transfer is pressed during the Transfer Function 0 sequence used to fire the remote contact.

"Remote contact one shot" means the open collector has been triggered, this happens after the Transfer Function 0 sequence has been completed.

"Howler tone" means there is no conversation and the handset is offhook for 3 or more minutes.

Problem entries:

"Command receiving timeout" (under detail indication) means that the network cable for the station has been unplugged or the network is otherwise not responding. Check network log files.

"Availability verification timeout" means that the network has failed during conversation (as opposed to before or after). Check network log files.

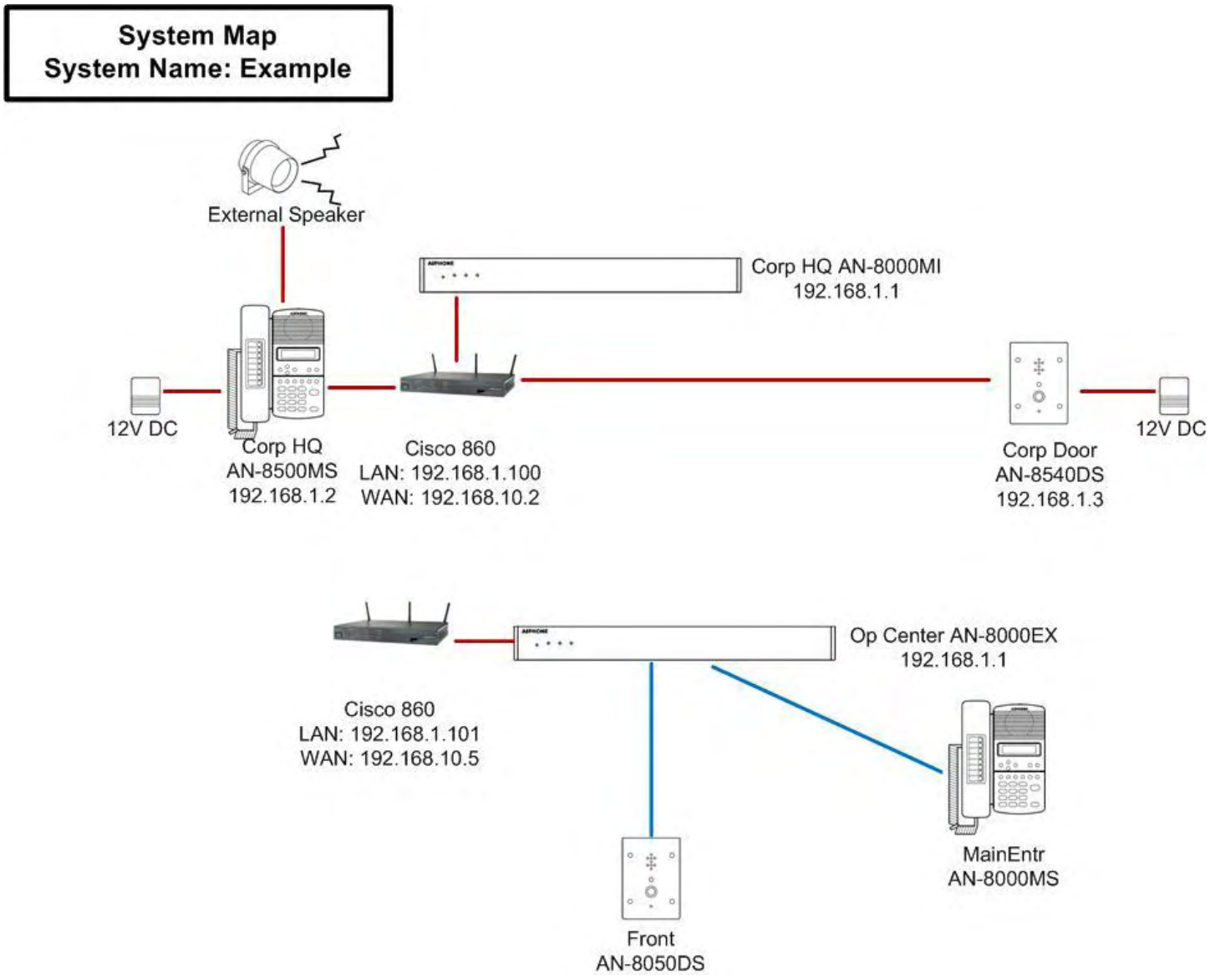
"Task endless loop occurred" may occur a "Grayed Out" or "Invalid Station Number NONE" and is usually a configuration problem. Gather configuration files, Operation Logs, Stream Logs, and Error Logs and contact Aiphone Technical Support. It may occur after an attempt to reach Line No. 225, as seen in an example log entry below:

Aug/18/2008 18:04:43, Exchange	, Speech path connection	, 2:1	, -	, -
Aug/18/2008 18:04:43, Exchange	, Calling start	, 2:1	, 1:1	, -
Aug/18/2008 18:05:03, Exchange	, Absence transfer	, 1:1	, 7:1	, -
Aug/18/2008 18:05:03, Exchange	, Calling start	, 2:1	, 7:225	, -
Aug/18/2008 18:06:01, Exchange	, Disconnection by timeout	, 2:1	, 7:225	, -
Aug/18/2008 18:06:01, Exchange	, Speech path disconnection	, 2:1	, -	, -
Aug/18/2008 23:48:22, System	, Task endless loop occurred	, -	, -	, -

"DSP Silent:(1)" may refer to a silence in audio at the component level on the PC board. Gather configuration files, Operation Logs, Stream Logs, and Error Logs and contact Aiphone Technical Support.

"Invalid command received" may be a configuration error. Gather configuration files, Operation Logs, Stream Logs, and Error Logs and contact Aiphone Technical Support.

Network Map Example and Workspace



Network Layout **Content on this segment** **Map Workspace**

Network 1: Site Name _____ EX #'s _____ MI's_____
Subnet Mask: ___.___.___.___ IP Masters _____
Gateway ___.___.___.___ IP Door #'s _____

Network 2: Site Name _____ EX #'s _____ MI's_____
Subnet Mask: ___.___.___.___ IP Masters _____
Gateway ___.___.___.___ IP Door #'s _____

Network 3: Site Name _____ EX #'s _____ MI's_____
Subnet Mask: ___.___.___.___ IP Masters _____
Gateway ___.___.___.___ IP Door #'s _____

Network 4: Site Name _____ EX #'s _____ MI's_____
Subnet Mask: ___.___.___.___ IP Masters _____
Gateway ___.___.___.___ IP Door #'s _____

AN System Configuration Sheet

Key: Station # numbers can be 2-6 digits and should not start with 7,8,9 or 0 to avoid Speed Dialing conflicts.

Model # choices for Exchange Ports are AN-8000MS, AN-8010MS, AN-8011MS, AN-8020MS, AN-8031MS, or AN-8050DS.

Name (optional) must be 8 characters or less. **Speed Dial** should specify which master a door calls.

System Name: ______________ Password: ___________

AN-8000EX # ___ IP Address: ____.____.____.____

Port #	**Model #**	**Station #**	**Name**	**Speed Dial**
1	______________	_______	_________	______
2	______________	_______	_________	______
3	______________	_______	_________	______
4	______________	_______	_________	______
5	______________	_______	_________	______
6	______________	_______	_________	______
7	______________	_______	_________	______
8	______________	_______	_________	______
9	______________	_______	_________	______
10	______________	_______	_________	______
11	______________	_______	_________	______
12	______________	_______	_________	______
13	______________	_______	_________	______
14	______________	_______	_________	______
15	______________	_______	_________	______
16	______________	_______	_________	______

AN-8000EX # ___ IP Address: ____.____.____.____

Port #	**Model #**	**Station #**	**Name**	**Speed Dial**
1	______________	_______	_________	______
2	______________	_______	_________	______
3	______________	_______	_________	______
4	______________	_______	_________	______
5	______________	_______	_________	______
6	______________	_______	_________	______
7	______________	_______	_________	______
8	______________	_______	_________	______
9	______________	_______	_________	______
10	______________	_______	_________	______
11	______________	_______	_________	______
12	______________	_______	_________	______
13	______________	_______	_________	______
14	______________	_______	_________	______
15	______________	_______	_________	______
16	______________	_______	_________	______

AN-8000EX # ___ IP Address: ____.____.____.____

Port #	**Model #**	**Station #**	**Name**	**Speed Dial**
1	______________	_______	_________	______
2	______________	_______	_________	______
3	______________	_______	_________	______
4	______________	_______	_________	______
5	______________	_______	_________	______
6	______________	_______	_________	______
7	______________	_______	_________	______
8	______________	_______	_________	______
9	______________	_______	_________	______
10	______________	_______	_________	______
11	______________	_______	_________	______
12	______________	_______	_________	______
13	______________	_______	_________	______
14	______________	_______	_________	______
15	______________	_______	_________	______
16	______________	_______	_________	______

AN-8000EX # ___ IP Address: ____.____.____.____

Port #	**Model #**	**Station #**	**Name**	**Speed Dial**
1	______________	_______	_________	______
2	______________	_______	_________	______
3	______________	_______	_________	______
4	______________	_______	_________	______
5	______________	_______	_________	______
6	______________	_______	_________	______
7	______________	_______	_________	______
8	______________	_______	_________	______
9	______________	_______	_________	______
10	______________	_______	_________	______
11	______________	_______	_________	______
12	______________	_______	_________	______
13	______________	_______	_________	______
14	______________	_______	_________	______
15	______________	_______	_________	______
16	______________	_______	_________	______

AN-8500MS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________
AN-8500MS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________
AN-8500MS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________
AN-8500MS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________
AN-8540DS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________ Speed Dial ________
AN-8540DS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________ Speed Dial ________
AN-8540DS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________ Speed Dial ________
AN-8540DS # ___ IP Address: ____.____.____.____ Station # ____ Name ____________ Speed Dial ________

AN-8000MI # ___ IP Address: ____.____.____.____ AN-8000MI # ___ IP Address: ____.____.____.____