AIR ID ®

Proximity Activated Identification

Installation & Users Manual

www.RFIDeas.com

RF IDeas Inc.

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for RF IDeas™ SOFTWARE and HARDWARE - RF IDeas' AIR ID* Proximity Activated System-

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If you are interested in our OEM or Independent Developer's Programs, please call!

Thank you,
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Buffalo Grove, Illinois 60089-6930

ID Badge Unit FCC compliance statement

FCC ID M9MMU100

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

ID Base Unit FCC compliance statement

FCC ID M9MBU100

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

TABLE OF CONTENTS

AIR ID

AIR ID

What's New In Version 2

The AIR ID system is greatly expanded with the release of Version 2. New features include the ability to centrally manage all AIR ID system users using the following new Enterprise Management Functions:

Two-Factor Authentication – This provides an additional level of security for the user and the organization. Two-factor authentication means you can, optionally, require the user to present two types of authentication: 1. Bring something (i.e. the AIR ID badge) and 2. Know something (i.e. their password). The implementation of this powerful system is the key. You can specify that the *second* factor (i.e. entering a password) is required on some periodic basis such as x hours, or days. Setting it to 24 hours, basically says that every day the user is required to validate themselves. This provides additional security from the loss or theft of a badge.

Enterprise Support through the DBLocation Button – Allows the administrator to specify a server location for the AIR ID database and system information. This centralized approach greatly reduces the time spent associate with issuing badges, modifying user's access to machines in the organization, and generally reduces the total cost of ownership from a system's maintenance perspective. The administrator may add or re-assign individual's rights from this server console, or from any machine in the organization which has the AIR ID software installed.

AddUser – Expanded to include the assigning of each individual to specific machines within the enterprise.

Enterprise Support through the Assignment Button – Allows the administrator to easily modify user access to machines with the use of check boxes

Enterprise Support through the Machine Button – Allows the administrator to view which machines in the enterprise are registered in the AIR ID system.

Enterprise Support through the Audit Log – Expanded to allow the administrator to view activity associated with AIR ID access by user or machine.

NT GINA Thin Mode – This is very useful if your organization is already using a third party supplied Gina with an NT workstation or server. The 'thin mode' permits our AIR ID Aware Gina to thread

through and use the other supplied Gina as the vehicle to the
authentication authority on your LAN.

Understanding Wireless Identification

What is AIR ID® Proximity Activated Identification?

AIR ID is a proximity activated access control ID badge that tells the PC
when the authorized user is present. Unlike password systems, biometric
readers, and smart cards, AIR ID uses RF (radio frequency) and therefore
the user has no involvement, giving the PC the ability to detect when the
user has left the area. Once the user has left the area, the PC is
automatically locked. When the user returns, the user password
information is exchanged between the AIR ID Base Unit attached to the
PC and the AIR ID Badge worn by the user. The result is a complete
lock and reactivation of access to the PC - all 100% hands-free!

Why is it necessary?

With the proliferation of PC's, cash machines, security systems, and
electronic locks, users are increasingly burdened with the requirement of
entering passwords and PINs to gain access to these protected systems.
AIR ID *eliminates the burden without compromising privacy or security.*

Who can benefit with the AIR ID System?

AIR ID is necessary for PC Users who have access to sensitive files, or
who just want the convenience of complete automatic login and walk-
away security. Employees using Win95/98/NT operating systems will
benefit with AIR ID. It eliminates the problems of manual interaction-
based security, increases efficiency, compliance, and may also prevent
security breaches.

Below are some examples of environments that will find AIR ID useful:

Medical: Hospitals and medical centers where nurses, doctors, and
administrative personnel need quick and secure access to patient records
without the burden of constant login and logout functions.
Financial: Trading floors, banks, insurance companies and other
financial institutions working with sensitive information, and performing
financial transactions, that should not be viewed by unauthorized users
and who need an audit log of transactions by user.
Corporate: HR, IS, payroll, and tax departments, company executives,
secretaries, sales personnel, etc. Departments responsible for their own
company- sensitive data should not be vulnerable by inadvertently

releasing information to other company employees. By securing the desktop and network applications automatically, the user is complying without any involvement.

Government: Employees, and government contractors, who have confidential information that should be secured at both their desktops as well as at the network level.

What is included with the AIR ID Kit?

- Base Unit, Badge (credit card size),
- Badge clip,
- 6 ft. DB25 cable,
- Adapter (DB9 to DB25),
- AIR ID Screensaver software,
- NT GINA replacement software,
- Installation and Users Manual
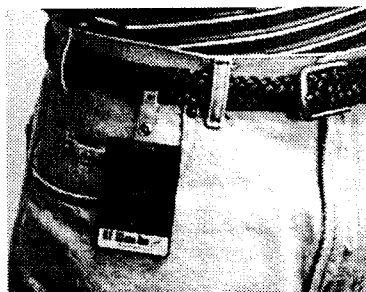
How does AIR ID Operate?
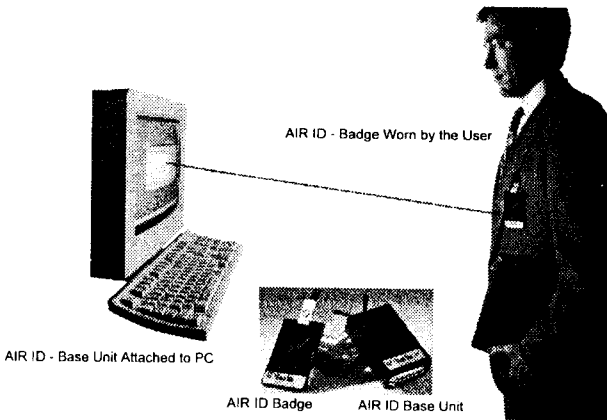
The Base Unit is attached to the serial port using the cable and adapter. The badge may be clipped to the user's belt, jacket, collar, inside front pocket, or worn around the neck.

As a user approaches his/her PC, the system automatically detects the user, using radio frequency (RF) communications to exchange the user password information, granting immediate access. If the PC user walks away, the system is automatically secured and enters into a screensaver mode. When an unauthorized person attempts to use the PC, access is denied.

What are the minimum system requirements?

486-DX33 with CD ROM drive (floppy version available)
2 MB RAM (10 MB hard disk space available for AIR ID software).
1 available serial port (not being used by another device)
Microsoft Windows 95, 98 or NT
For Windows NT, the installer as well as the user must have administrative rights to *access and modify* AIR ID files.

> *Caution: Turn off your system prior to attaching any peripherals.*

> *Note which communications port number you are using to attach the Base Unit.*

Optional badges: For multiple users sharing a single PC, additional badges for each PC- user may be added.

Hardware Installation

If there is a 9 pin serial port connector present, attach the DB9 to DB25 adapter to the PC serial port. Attach the 25 pin cable between the AIR ID Base Unit and the serial connector (or attached adapter). The Base Unit is self-powered by the serial port and therefore no other connections are required.
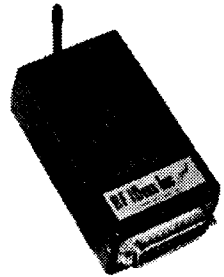
We recommend using the enclosed 6-ft cable to allow for orientation adjustments later.

You may place the Base Unit under your desk, beside your PC, or where you feel appropriate. Adjustments may be needed (for the orientation and placement of the Base Unit) to create a *practical proximity distance* in the viewable range of your monitor. Keep in mind that metal objects will affect the Base Unit's RF communications with the badge.

Windows 95/98 Users

To verify which serial port is available, follow these steps:
1. Click **Start**
2. Select **Settings**
3. Click **Control panel**
4. Select **System**
5. Select **Device Manager**
6. Listed under the category: Ports (COM & LPT), locate an available port. i.e. COM1 or COM2

Verify this port agrees with the connector attached to the Base Unit.

Windows NT Users

To verify which serial port is available, follow these steps:
1. Click **Start**
2. Select **Settings**
3. Click **Control panel**
4. Select **Ports**
5. Listed under the category: Ports (COM & LPT), locate an available port. i.e. COM1 or COM2
6. Verify this port agrees with the connector attached to the Base Unit.

AIR ID Badge & Battery

Your Badge comes complete with a *coin cell lithium battery* (CR2025). The battery may be replaced by pulling open the battery drawer located on the bottom of the badge. The (+) side of the battery faces up when placed in the battery holder. When the battery is seated properly into its holder, the battery drawer slips easily into the badge.
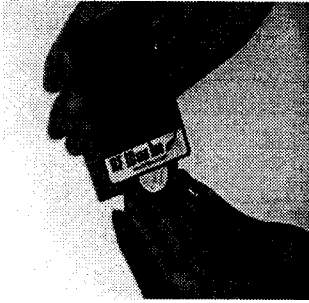
Battery Life
The battery is expected to last up to one year. Factors that may affect the battery life are:

- The *length of time* you are at your desk during the day.
- How *often* you are at your desk when there is *no keyboard* or *mouse activity*.
- If the *Badge Sensing* is set to Room Proximity to *poll* for the badge or *checked* for the next keyboard or mouse activity.
- The number of seconds or minutes of *inactivity* before the screen saver is launched by Windows operating system.
- Proximity of other AIR ID users.

Software Installation
Upgrading
If you are upgrading from a previous release it is advisable to copy your database of users (AirIDss.RFI) to a backup location. Depending on the upgrade version, this database may or may not be compatible. Please review notes in the Readme.txt file on the CD.

NOTE : NT Users Important

AIR ID is a security application that tightly integrates to Window NT's security system. Therefore care must be taken when installing and un-installing AIR ID or you may render your Win NT system inoperable. If you are updating your AIR ID system with a new version, it is important that you follow these instructions:

1. As with all NT installs you should update your emergency disk prior to any software changes to your system. Keep this disk in safe place since it contains security information about your system.
2. In order to install or un-install you must have an account with administrator privileges. Be sure to log onto NT using an administrator-enabled account.
3. If you want to preserve your existing AIR ID user database, be sure to copy the AIRIDss.rfi file located in the "\Program Files\RFIDeas\AirID" directory to a backup filename (i.e AIRIDss.bak).
4. Uninstall the existing AIR ID™ software from your system using the add/remove program option with in the Win NT Control Panel.
5. Follow the uninstall wizard instructions. Note that some files may warn that they are being shared and should not be uninstalled however, you MUST answer yes to the question:
                    Run Airunstl.dll?
This action will make sure the registry is updated and the RFIDeas GINA is properly deleted

6. It is IMPORTANT that you RE-BOOT your system prior to installing the new AIR ID system. Failure to perform this step WILL render your system inoperable.
7. After rebooting, you may now install the new version of AIR ID following the wizard instructions.
8. If you saved your AIRIDss.rfi user file you may now copy the saved file over the new AIRIDss.rfi file.
9. Re-boot your system.

Centralized Enterprise Management Installation Procedure

If you have purchased the Enterprise Management Release you need to use the following procedures for performing the installation on the server and clients within your organization. If you haven't purchased this release please skip to the section labeled *'Individual PC Installation Procedure'*.

AIR ID's Enterprise Version takes advantage of its powerful centralized Enterprise Management features. Since this release provides for a single administration server, you need to determine where this server location (path) is before any installation occurs.

Administration Server

You can choose any location on the LAN that is easily reachable for clients needing access to the AIR ID system files. It is advisable to have this path within the building so as not to disrupt individuals should a connection be lost. As an administor you will be able to maintain users from any location on the LAN, provided AIR ID is installed at that location. The only requirement for obtaining administrative access is knowing your AIR ID 'admin' password.

1. Choose the PC and location for the system files and run the appropriate Setup file found on your AIR ID CD. Please see the Software Installation Procedure below.
2. At the starting screen, after selecting the appropriate COM port, you will see a button labeled DB Location. This is used to define the location that is used for the AIR ID Enterprise system database files. If this is your first time installation, you should set this location now. You will be able to modify this location in the future from the standard administrator functions defined later in the user's guide.

3. Do not add users at this time! You will be able to add users to this Enterprise database, and assign users to machines within the organization, once the client PCs have installed the AIR ID software. The client installation will automatically assign its Windows Machine Name to the Enterprise database when the client's DB Location is pointed to this enterprise database.

Client Side

For *each* client using AIR ID you will need to install the appropriate Setup file (95/98 or NT) as described in the Individual PC Installation Procedure.
1. Once you start the installation procedure, you need to set the **DB Location** to point to the same DB Location you chose for the Server side above.
2. You may go ahead and add the user for this machine but it is advisable to add all users at a single session, from the Enterprise Management Server.
3. After all the clients are installed you may go ahead and add users, assign them to the various machines throughout the enterprise using the **AddUser** and **Assignment** functions described later in this User's Guide.

Individual PC Installation Procedure

Windows NT Specific

NOTE:

1. **The person performing the installation must have administrator rights since several files are written and registry modifications are required during installation.**

2. **The PC users for this machine must have rights to access the AIR ID sub-directory and have rights to modify the files within this sub-directory since an Audit Log is maintained.**

Under Windows NT the AIR ID system behaves slightly different than it does under Windows 95/98. The differences are a result of the way the logon and security issues are handled between the two operating systems.

GINA is the *Graphical Identification* and *Authentication* layer for NT. Under Windows NT, the GINA handles the initial login, all password authentications, including that required for the screensaver password system. AIR ID makes use of this NT security system by providing a GINA *replacement, which is fully compatible* with NT4.0 service pack SP3 and above. Since NT 5.0 is not released at the time of this printing, and Microsoft may change the specification, you should check with one of RF IDeas Authorized Solution Providers, before installing the GINA replacement on any version of NT beyond 4.0 SP3.

The GINA replacement will permit the AIR ID screensaver to function normally. Other third party screen savers under NT can also function with your AIR ID system with one exception: They are *not* able to provide *Room Proximity Activation.* The user must move the mouse or press a key on the keyboard before the badge is read, authentication takes place, and the access is granted. When the screen saver is interrupted by a user (i.e. keyboard or mouse activity), the GINA handles this authentication process using the normal NT procedure. Third party screen savers, that are not AIR ID Aware, have no facility to poll (Room Activation) for a user's Badge while running in screensaver mode.

The GINA replacement does however provide for complete NT workstation and server logon - all proximity activated. There are several user settings that allow for hands-free badge detection. Please review the NT Settings Dialog Tab section of this user's guide. If you are currently using a third party supplied GINA, contact RF IDeas technical support.

AIR ID software installation will require the CD. Place the CD in your CD drive and follow these steps to install the application.

1. Click **Start**

2. Select **Run**.

3. **Use 3a for Windows 95/98, use 3b for Windows NT**

   3a. Type **[drive letter where CD drive is located]:\ SetupNT**

   3b. Type **[drive letter where CD drive is located]:\ Setup95**

4. *Note: A screen will appear to remind you that you are about to install AIR ID. The next screen will recommend closing other applications. Please make sure other applications including those that make use of the communications port are closed.*

5. Verify and Press **Next**

6. Continue as you would with any software installation under Windows 95/NT. The setup software will recommend saving the directory shown. When you receive the message *Installation was Successful*, Press **OK**.

> *If there is a problem with the installation, allow the setup program to uninstall. Should you need to reinstall or remove the AIR ID software, always use the Control Panel's Add/Remove Programs icon so the system is successfully removed, and reboot.*

Software Setup

In this section you will:

1. *Configure Windows to enable the AIR ID screensaver application and set any graphical preferences.*

> **NT NOTE:** *NT users may use other 3rd party screensavers provided they use the Keyboard/Mouse activation mode. Screensavers from other companies do not support the use of the Room Proximity mode unless they are "AIR ID Aware" (these activation modes are discussed later).*

2. *Set the Base Unit COM port, define the proximity zone, set the screensaver Wait time, and choose the type of Badge Sensing.*
3. *Add users, and perform the Base Unit orientation setup.*

Enable the AIR ID Screensaver in Windows

To get started, follow these steps:

1. Click **Start**
2. Select **Settings**
3. Select **Control Panel**
4. Click **Display**.
5. Select the **Screen Saver** tab
6. Click on the down arrow and Select **AIR ID**
7. The **Password Protected** box behaves slightly different between Windows 95/98 and NT.
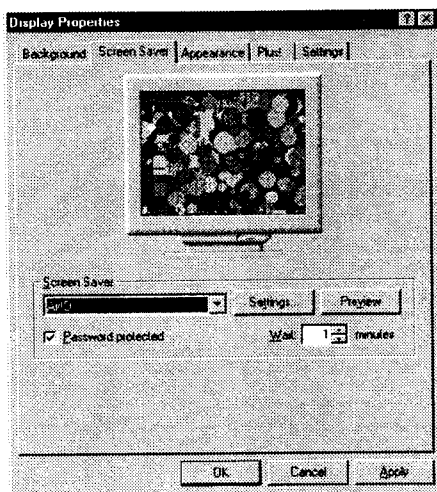
NT Note: For NT, if this box is not selected no badge or password is required to gain access to the system. This may be useful for users who wish to use the logon (GINA replacement) facilities of the AIR ID system, but not use the daytime walk-away features of the system achieved with the screensaver application.

8. **Password Protected:** Under Windows 95/98, this selection determines if we check your Windows password (checked) or your AIR ID (not checked).

9. The **Preview** buttons will show the graphics parameters for user adjustment.

10. The **Wait** field sets the number of minutes the mouse/keyboard will be inactive before launching the screensaver. This Windows parameter value will determine how soon the system will become secure once you leave your PC. Windows defaults to a minimum of 1 minute delay.

NOTE: The AIR ID software provides a way to set this delay in seconds and to set the delay as low as 10 seconds. This is very useful for providing a timely proximity activated system. There are 2 important things to be aware of when choosing to use the AIR ID delay:

1. Every time you click OK in the Control Panel's screensaver dialog box the Windows delay (in minutes) is sent to the operating system. Therefore you will need to use the AIR ID software afterwards in order to be able to set this parameter in seconds or to a value less than one minute.

2. The lower you set this value, the shorter the period of time the PC is exposed when you step away and this increases the security of the desktop. Lowering this value does require the badge to respond more often and this will affect the life of your AIR ID battery.

Click the **Settings** button and the **AIR ID** setup screen will appear. This screen will allow you to modify the settings related to the graphical aspects of the screensaver. Use the slide bar to modify the size of the circles.
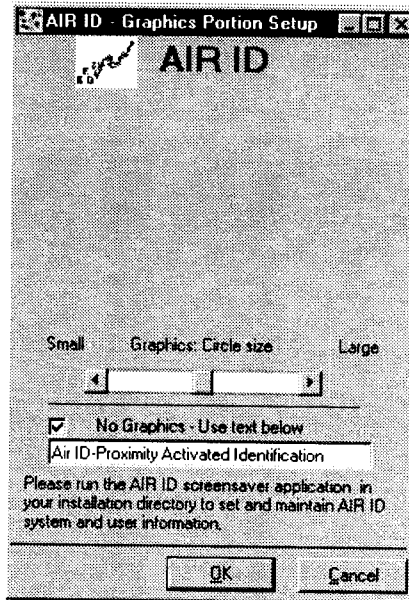
If you prefer to have a scrolling text message displayed, click the Checkbox labeled "**No Graphics Use Text Below**". Enter in the appropriate message in the field beneath the Checkbox. This message is then scrolled during screensaver operation.

AIR ID

All other settings related to the user(s), passwords, and proximity settings are described in the next section.

Setting AIR ID System Parameters

The AIR ID Setup software is found by using the Windows **START** button located on your desktop. From there choose **Programs** to locate the **AIR ID** folder. In the **AIR ID** folder, you will find the **Readme** file together with the AIR ID application, and other related files. Select the **AIR ID** application to begin setting the various AIR ID parameters.

Quick Start Guide

If this is your first time running the application, or you have chosen not to disable the Startup Screen, you will see the following screen. This screen is intended for 1st time users. If this applies to you, use the **Quick Start Guide** to perform the necessary initial setup requirements.
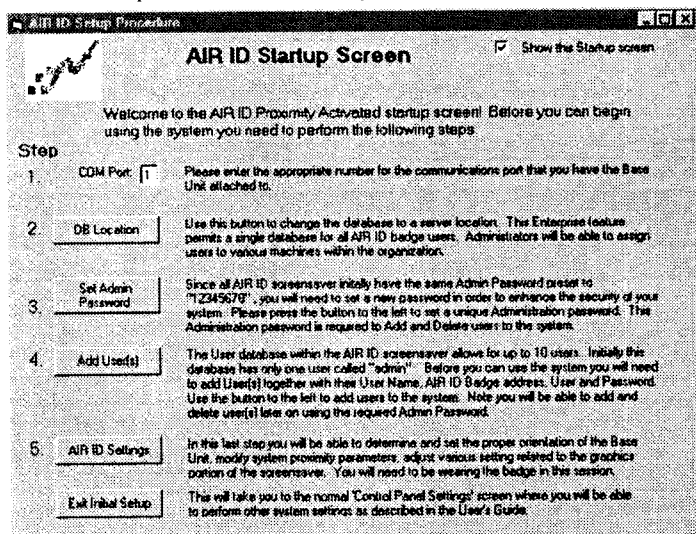
If you would like to disable this screen from appearing, clear the checkbox labeled **"Show this Startup Screen"**. If you would like to reactivate this screen, use the similar checkbox found under the **About** tab. Press the **"Exit Initial Setup"** button located at the bottom, and proceed to the next section.

Base Unit Dialog Tab
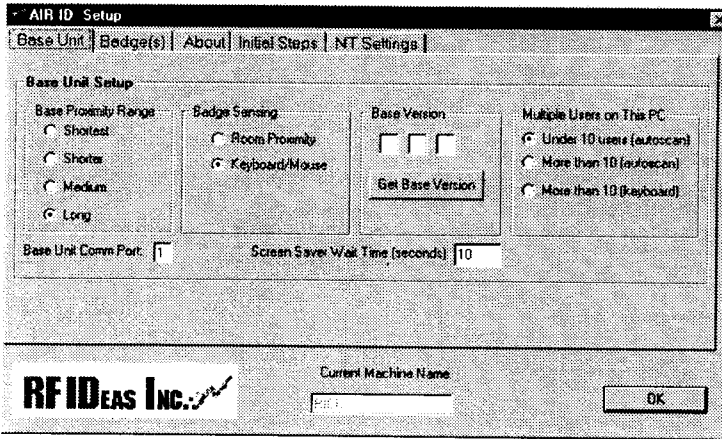
Base Unit Com Port

Before adding user(s) and badge(s) to the system, set the **Base Unit** parameters by typing the Com Port number which the AIR ID Base Unit is attached: 1 for COM1, 2 for COM2 etc.

You may verify this communication is correct by reading the version of the Base Unit. Press the button labeled **Get Base Version.** The three boxes to the right of the button will display the version of firmware located within the Base Unit. If you receive an error message, you will need to verify the connection between the PC and Base Unit and make sure you are selecting the proper COM port.

Get Base Version

Pressing this button will cause the software to read the Base Unit directly. This is useful for:
1. Technical support issues,
2. Verifying the Com Port is attached correctly,
3. Verifying the Com Port is open for communication, or
4. Verifying the Base Unit is working properly.

Base Proximity Range

Before we set the range, we need to discuss the scope of the product and its intended purpose.

Generally speaking, the range is variable from approximately 3 to 30ft. There are several factors that affect how the range of the Base Unit will communicate with the ID Badge.

> **Note: Badges Must be Worn on the Person**
>
> *First, the badge needs to be worn, or against the user's body in a shirt pocket. A Badge which is not worn by the person will have much greater ranges (sometime 20 extra feet of proximity detection) than one that is placed in a shirt pocket or clipped to a belt. We do not recommend placing the Badge in a wallet or pocket where the user's weight may be placed on the Badge. The housing is not designed to accommodate this usage.*

RF Issues

Since the communication is using radio frequency (RF), metal objects in the proximity range will cause the signal to *bounce* or reflect. There are some *dropout zones* (areas where the reflected signal combines inversely with the main signal to cancel the main signal out entirely). We have designed the Base Unit to *minimize* this effect. If you are experiencing excessive dropouts, try moving or rotating the Base Unit.

Using a Practical Proximity Zone

In practice, the proximity zone should be set to function reliably *within the viewable range of your monitor, or at arms reach of your keyboard (whichever is greater).* For practical purposes, the PC is not usable beyond this range except for background processing. Windows permits programs in the background to continue to operate while in the screensaver mode.

If you are within a short distance of other AIR ID users, there is a possibility that their Base Unit signal will interfere with your Base to Badge communication. For this reason, you may find times where a second reading of the Badge is required in order to gain a successful access. Setting your range to the shortest reliable setting may minimize any possible interference.

As a rule of thumb the range selections are as follows:

Shortest	3-8 feet
Short	4-12 feet
Medium	6-15 feet
Long	10-30+ feet.

As discussed earlier, the range depends on many factors associated with your work environment and may vary beyond these distances.

For now, we will set the range to **Medium.** Once we set up a user and program the badge, we will proceed to reduce the range.

Positioning the Base Unit

With this in mind, we are ready to proceed and set the range. Position the Base Unit *relatively* close (2 to 5 feet) to where you sit at your keyboard. The signal will reach the badge easier if the Base Unit is positioned in front of you. A good location might be tucked under the front corner of your monitor on the side you generally wear your badge, with the Base Unit's antenna toward you and the cable following behind the monitor. To perform orientation adjustments, you will need to first add a user and then follow **Get Password** (continuous) procedure.

> *The goal is to set the range for the shortest distance possible while permitting a reliable response within the viewable range of your monitor.*

Screensaver Wait Time (seconds)

Like any screensaver under Windows 95/98/NT, it is launched when there is no keyboard or mouse activity for the period of the specified **WAIT** time. The **WAIT** time is set in two places (mentioned earlier) and this can cause some confusion. Windows lets you set this parameter in the Control Panel's Display Properties under the Screensaver tab. The second place this setting is entered is using AIR ID's **WAIT** setting. The **WAIT** parameter that is used by windows is the last one entered!

Once this **WAIT** period has elapsed, the AIR ID screensaver is launched by the operating system. Before the screen is blanked, AIR ID checks the defined proximity area for a valid authorized Badge. If one is found, the screensaver execution is terminated immediately and control is returned to the user. In Windows 95 you will notice the cursor turns to an hourglass briefly during this checking procedure. If no valid badge is detected, the monitor display, keyboard and mouse are secured while the

Ctrl-Alt-Del (and on the newer keyboards, the special Windows key) are disabled until a valid user Badge is found, or valid password is entered.

This is where Badge Sensing comes in to play, i.e. how the badge will be detected when you return to your PC.

Badge Sensing

Select **Room Proximity** when you need the PC to detect your presence as you approach your computer. This mode forces the screensaver software and the Base Unit to continuously poll the proximity area for the presence of the allowed AIR ID badges. In general, this mode is *not recommended;* it causes continuous signals, can interfere with other user's badge detection in the area or adjacent rooms, and may reduce the life of the coin cell battery in your Badge.

Select **Keyboard/Mouse** and your badge will be checked once a key on the keyboard is pressed, or the mouse is moved. This mode of operation is recommended to prolong the battery life and to minimize interference with other AIR ID users in the close proximity.

Caution: Selecting room proximity may cause additional RF activity within your area or adjacent rooms. While AIR ID's technology will not cause interference with other units, it will cause the other units to be less responsive since they will need to wait for a clear time. This can be avoided by setting the Badge Sensing to Keyboard/Mouse.

In either case, once a key on the keyboard is pressed, or the mouse is moved and no valid Badge is detected, you will receive a Password Dialog Box. This permits you to manually enter a valid password and gain access to the system.

NT Users: If you are using a 3rd party supplied screensaver, Keyboard/Mouse is the only Badge Sensing Mode available.

Note: If you have the "More than 10 users for this PC" checkbox selected, the Room Polling is automatically deactivated.

Multiple Users on This PC

This section does not apply to AIR ID LT users.

The AIR ID system has the ability to auto-detect more than one badge per PC. Since each badge has its own address and they all operate on the same frequency, there are choices you can make to optimize the performance of AIR ID on your system. Typically the base unit will detect a badge in less than 1/2 second, often times less than 1/3 of a second. When you have up to 10 individuals authorized on your PC, this can cause a maximum delay of up to 4-5 seconds. Choosing one of the alternative badge search methods can reduce this delay.

Under 10 Users (auto-scan)

Windows 95/98: The last authorized user's badge is checked 1st. If this user is not present, the software will cause the Base Unit to look for all authorized users on this PC, until a valid user is found. If no valid badge is found, the user attempting to gain access will then see a password dialog box. Once a valid password is entered manually, access is granted.
Windows NT: For Logon the Windows 95/98 procedure above is used. For screensaver operation, only the user who is logged in is checked.

More than 10 Users (auto-scan)

Windows 95/98: The last authorized user's badge is checked 1st. If this user is not present, the software will cause the base unit to look for any badges within the proximity zone set for this station. This is done by requesting all badges to respond with their address. This can cause the following problems:

1. Statistically, it is possible that more than one badge may respond at the same time causing RF interference. The result is the base unit doesn't receive accurate data and cannot grant access.

2. The Base Unit may detect a badge that is not authorized.

Windows NT: For Logon the Windows 95/98 procedure above is used. For screensaver operation, only the user who is logged in is checked.

More Than 10 Users (keyboard)

Windows 95/98: The last authorized user's badge is checked 1st. If this user is not present, the software will display a password dialog box permitting the user to gain access by:

1. Presenting a valid password, or

AIR ID

2. Entering the first 1 to 5 characters of the Username. By entering the first 1 to 5 characters of the user name, the badge search is limited to only the users on this machine who match this condition. For example, assume your Username is Sam, entering 'SA' in the dialog box would cause the AIR ID system to search for badges whose users have name like Sam, Sally, or Sarah. If you happen to know that there are no users on this system with usernames that begin with the letter 'S', there is no need to enter more than 'S'.

Windows NT: For Logon the Windows 95/98 procedure above is used. For screensaver operation, only the user who is logged in is checked.
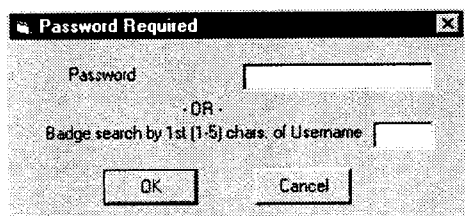
Badges Dialog Tab

Overview
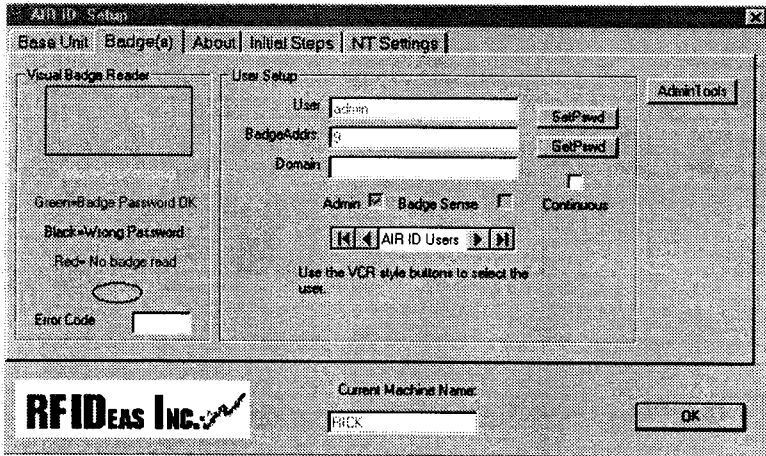
All AIR ID screensaver systems have a database that holds various user
information. The **Badges Dialog Tab** is a convenient screen to view
user information and test the badge's RF characteristics in your
environment. A Visual Badge Indicator is shown to assist the user in
identifying where signal cancellations may exist and adjust the Base Unit
location in order to work around these normal RF phenomena.

Types of Users

There are three types of users in the **AIR ID** system:

> **TIP:** If you are the only user on your system, you should set your
> "admin" password to the same as your user password to avoid confusion.

Administrative Users

There is one administrative user, Username is "ADMIN", permitted in
the AIR ID system. This user has the ability to **add** and **delete** users to
the system as well as modify other system settings. The "ADMIN" user
does not have proximity badge capability. This protects the system from
being compromised when the ADMIN user is near, but not using a
system protected with AIR ID.

Non-AIR ID Badge Users

You are permitted to **add** other users to the system who are not yet using
AIR ID badges.

AIR ID

AIR ID Badge Users

These users may gain access to the system using either their badge or (if they left it at home) manual password entry.

Set (Changing) Password

To change password, click on the **SetPswd** button. A change password dialog box will appear. Enter your **Old Password**, type your **New Password**, and **Confirmation Password.**

Use and select the **Write to AIR ID Badge** check box to write the password to the badge. When checked, it will be written to both the badge and the database. If the box is not checked, the change is reflected in the database only and any badge for this user will not be recognized.

*The **Write to AIR ID Badge** check box is disabled for AIR ID LT users.*

NOTE: To synchronize a badge later, simply perform this procedure again using the same password for the Old and New Password fields.

To register the changes click the **Set** button.

NOTE: (Does not apply to LT) If you feel an authorized badge is lost or stolen you can use this procedure to disable a lost or stolen badge by changing the password in the AIR ID system. Since the badge is missing it will not reflect the new password and it is essentially disabled. NT user should use the GINA Change Password button so the operating system is synchronized.

Get Password

This button allows you to read a user's badge to:

- Verify the Badge & Base Unit are working.

- Make sure the password is set correctly.

- Determine a practical placement for the Base Unit.

- Set the Base Unit's orientation for proximity range adjustments to achieve maximum reliability in the monitor's viewable and usable range.

Reading a Badge - Orienting the Base Unit

1. Select a user from the database using the record selectors, on both sides of the field **AIR ID Users** (the record selectors look similar to those found on your VCR).

2. Once you have the user's name shown in the **User** field, click on the **GetPswd** button. This will cause the Base Unit to request the Password from the Badge once.

Once you select the **Continuous** checkbox, the AIR ID Badge will read at approximately twice per second. *The AIR ID LT Badge will be read once every two seconds.* This is useful for determining the setting of the proximity range and in orienting the Base Unit for a reliable operation. To cancel the continuous reading of the Badge, *de-select* the **Continuous** checkbox.

If the Badge is read successfully, the **Visual Badge Reader** will be displayed as a **GREEN** box.

If the Badge is read but the password from the badge does not agree with the database, the Visual Badge Reader will be displayed as a **BLACK** box. Typically the database and the badge are not synchronized with the same password. If this is the case, perform a **SetPswd** operation to synchronize the badge with the database for this user.

If the Badge is not detected, the Visual Badge Reader will be displayed as a **RED** box. If this occurs, you may have an incorrect badge, a low battery in the badge, the badge is located out of the range of the Base Unit, the orientation of the Base Unit needs to be modified, or there were errors indicating the connection with the Base Unit is incorrect.

With this screen you can also verify the Badge Address and check whether the Badge Sense checkbox is checked. If this box is not checked, the Badge will not be polled and this user can gain access only by manual entry of a valid password.

> *NOTE: You can cause the Base Unit to continuously read the Badge by first selecting the checkbox labeled **Continuous**, and then pressing the **GetPswd** button. To stop the continuous reading mode, de-select the **Continuous** checkbox.*

By default, the ADMIN user is a non-badge user and does not have Badge Sense capability.

Orienting the Base Unit

To optimize the wireless connection between the Base Unit and the AIR ID Badge, you may need to slightly rotate the orientation of the Base Unit to reduce *drop out zones* (see RF Issues) and enhance the communication between the Badge and Base Unit. The best way to optimize the orientation is to...

1. Sit at your desk as you normally would with the keyboard and monitor facing you.

2. Place the Base Unit at a convenient location either on the side of you or facing you. Try placing it within 4 feet or so of your chair. A good location might be tucked under the front corner of your monitor with the Base Unit's antenna showing.

> *NOTE: You will not be able to learn the contents of the password by performing a GetPswd command.*

3. Set the **Continuous** checkbox under the GetPswd button, and press the GetPswd button so that the Base is constantly requesting the badge's password.

4. While maintaining your reading ability of the PC's screen contents, rotate your chair and move it back and forth slightly noting the color of the Visual Badge Reader. If you notice the **RED** indicator stays **RED** while you are able to read the monitor, you probably need to rotate the Base Unit slightly (try increments of 10-15 degrees), or change the range. Keep in mind that a quick flash of RED is acceptable provided that the GREEN indicator is maintained most of the time.

Administrative Functions
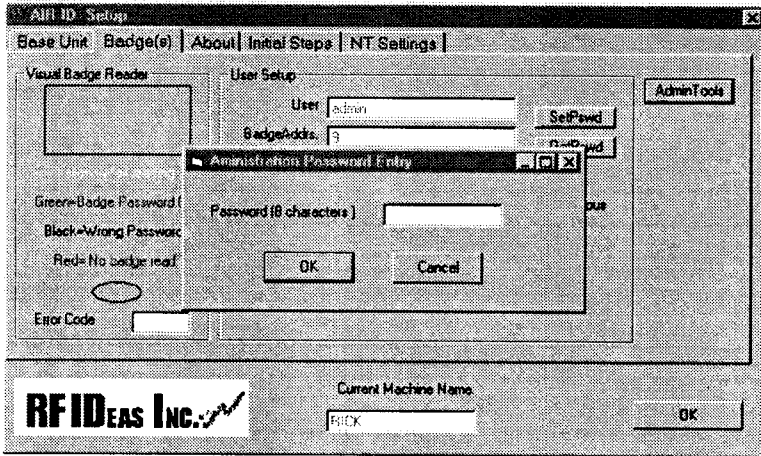
To gain access to the administrative buttons you need to enter the AIR ID *admin* password.

A valid *admin* password yields the following screen:
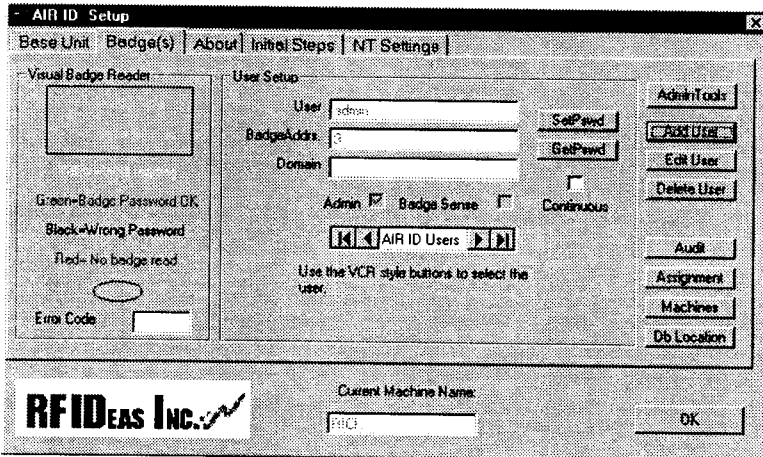
NOTE: Since all AIR ID system ship with the same 'ADMIN' user's password (12345678), make sure you change this password in order to maintain the security of the system.

Add User

Type the User's Username and their Badge Address (found on the Badge label).

NOTE: For NT Users, make sure that the Username and Password entries are identical to those used for NT. NT Users added to the AIR ID system will not be detected (logon or screensaver) until the PC is rebooted. This is due to the way the GINA provides its security.

If you want to add a temporary user or user without a Badge, leave the Badge Address field empty.

AIR ID includes a provision for Two-Factor Authentication. When enabled, this feature requires the user to provide a password (manual) entry as specified by the Duration and 'Pwd Entry Required' selections. This feature is useful for those concerned about lost or stolen badges. The value in the Duration field applies when either the Hours or Days radio button are selected.

Note the **Write to AIR ID Badge** Check Box. When checked, the password will be written to the badge and the database. *This does not apply to AIR ID LT users.* If you leave the box unchecked, only the database will reflect the new user and this user will be allowed access only via a keyboard entry. This is useful when you want to issue a temporary password to co-workers or allow for supervisor access.

Edit User
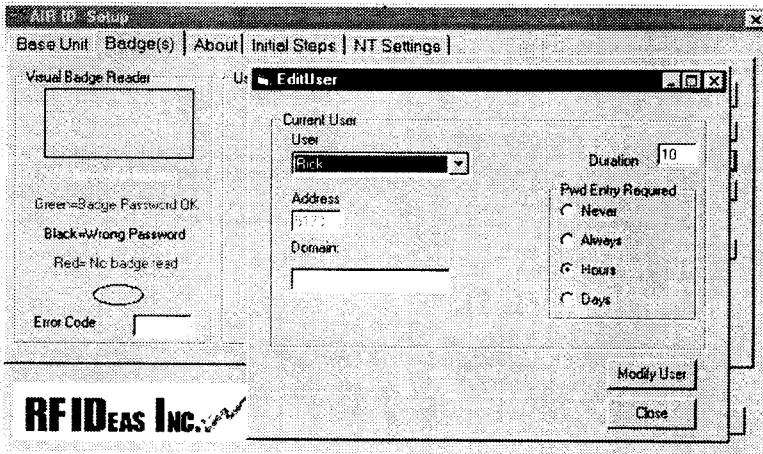
The Edit User screen allows the administrator to modify Two-Factor Authentication parameters or the default Domain used by NT users. Once the parameters are modified, use the 'Modify User button to register the changes.

Delete User
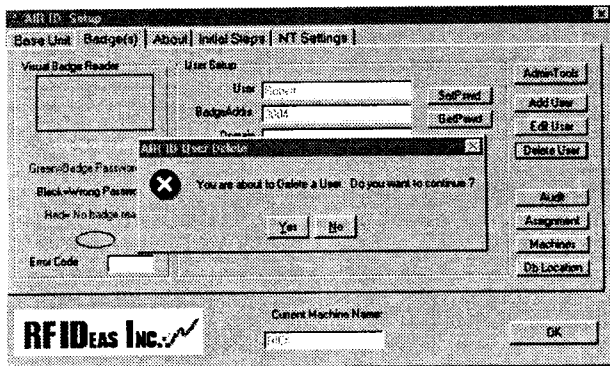
Select the User using the VCR style buttons and then click on **Delete User**.

Another dialog box will appear stating "You are about to Delete a user, do you want to continue?" Make your selection.

NOTE: If you feel an authorized badge is lost or stolen, simply have the administrative user remove this user from the system by using the Delete button. Another method that will disable a lost or stolen badge is to simply use the SetPswd button to change the password in the AIR ID system.

Audit Log
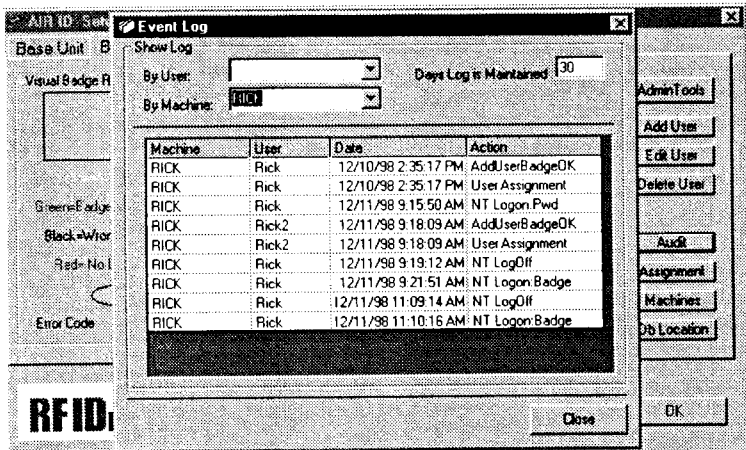
The Audit Log button provides the administrator with the ability to track user activity on the system, including the auditor's activity. Pressing this button brings up the Audit Log screen as shown below.

The "admin" user may select to list the audit information by Machine or User. Choosing the appropriate pull down button makes the selection.

Audit: Windows 95 Specific

The following are the items which the system provides tracking for Windows 95/98 users:

1. Access with a badge
2. Access via manual password entry
3. Add user, no badge
4. Add user with badge
5. Add user but badge programming failed
6. Delete user
7. Set password

This information together with the Username the date and time of access is maintained for a specific number of days. The administrator may set the number of days the log file is maintained using the field provided.

Audit: Windows NT Specific

When using the Windows NT GINA (Graphical Interface and Authentication) routine provided, the NT operating system provides its own audit trail system. Therefore the access is recorded through the operating system. The AIR ID system does however keep track of the following: (in addition to the items above)

8. Change Password
9. Change Password: Failed
10. Logon Badge
11. Logon Badge Fail
12. Logon Pwd
13. Logon: Pwd Failed
14. Logoff
15. Shutdown

Assignment

This screen allows the administrator to assign user access rights to
various PCs throughout the organization. Select and highlight the
username using the drop down select box. Shown in the Machine
Assignment box are the available machines (standard PC naming
convention used) this user can be assigned access to.
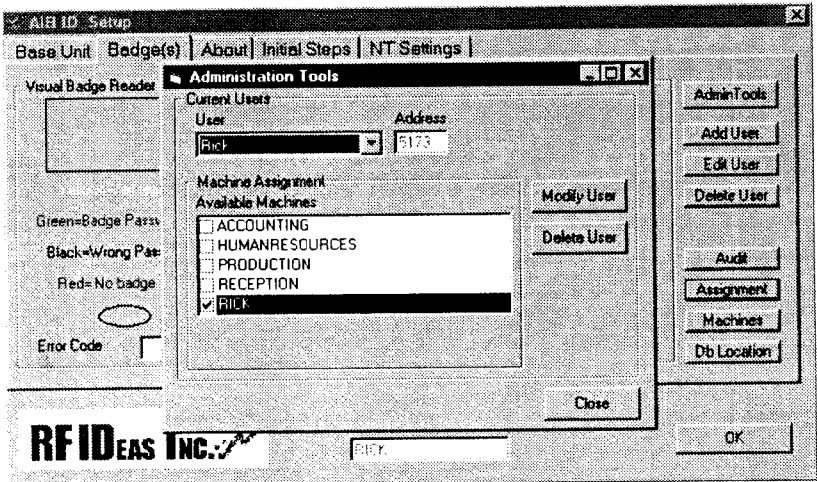
A check indicates this user has access to this particular PC. Once you
have all the selections made, press the Modify User button to register the
changes. If there are additional machines not listed in the Machine
Assignment box you need to add, install the AIR ID system on those
machines and they will automatically be registered (assuming the
DBLocation is identical).

Machines

This button allows the administrator to delete PC machines in the
organization to the AIR ID system. The AIR ID system will
automatically add your machine name to the list when the AIR ID
software is installed.

Each PC will show its Machine Name in the box labeled: "Current
Machine Name".
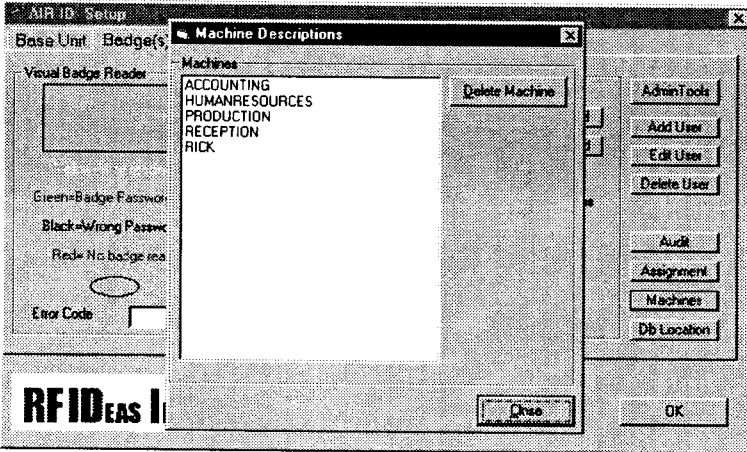
DB Location

This feature allows the 'admin' to select the location for the centralized
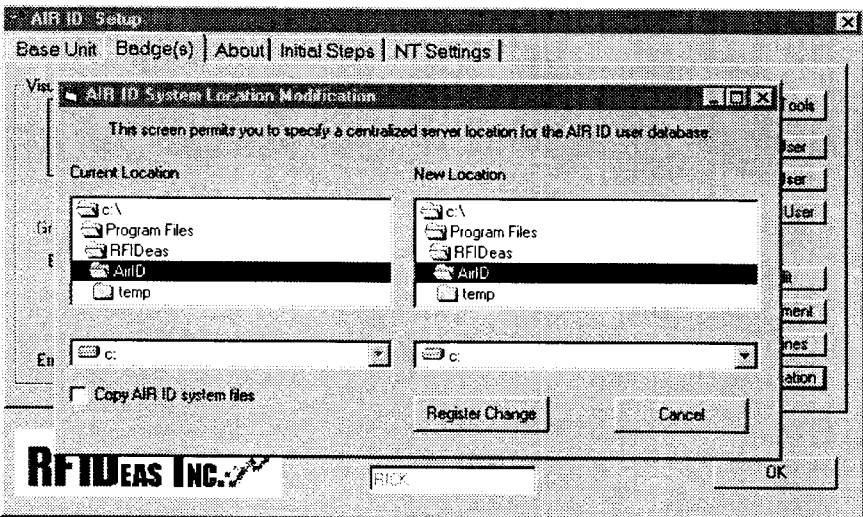

database of AIR ID users. The 'Current Location' shows the path where
the AIR ID user database is located.

Use the 'New Location' path to relocate where you need to have the AIR ID user database reside. Selecting the **Copy AIR ID System files** will cause the database files to be copied to the New Location.

> **NOTE:** If you decide to move these system files after the original installation you must make sure that each client is modified to point to the same location.
> You may only use the **Copy AIR ID System files** for the 1st client as AIR ID will detect a copy of the database already resides at the target location.

NT Setting Dialog Tab

This section applies to PC running Windows NT version 4.0 SP 3. Under Windows NT
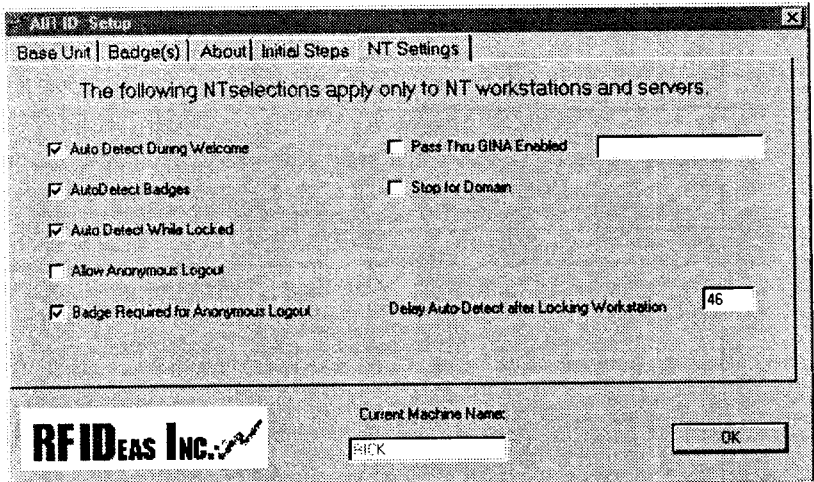
AutoDetect during Welcome - This permits hands-free badge detection at the initial logon session.

AutoDetect Badges- Allows polling of the badge for complete hands-free operation at the first logon screen (after the Welcome screen).

AutoDetect while Locked - This permits hands-free badge detection from either a Locked state or returning from screensaver operation.

Allow Anonymous Logout – Permits anyone to logout the currently logged in user. If this is not selected, only the current 'logged in' user can perform the logout function

Require RF ID Badge for Anonymous logout – An AIR ID Badge, authorized on this PC, is required for this operation.

Pass Through GINA Enabled - Since other companies provide GINA replacements for NT, there may be a need to have the RF IDeas supplied GINA work together with other 3rd party GINAs. RF IDeas' GINA can operate in a 'Thin Mode' when this election is enabled.

> *Please make sure you have an alternate boot-up method as other GINAs may not be compliant with the RF IDeas' 'Thin Mode'.*

In the 'Thin Mode', the RF IDeas' GINA first gathers the credentials from the AIR ID badge and system, and then submits to the 'Pass Through GINA'. The 'Pass Through GINA' is the GINA that was already installed on your PC before AIR ID was installed. Therefore, this mode is only valid if this NT machine was using another 3rd party GINA before installation of AIR ID.

Stop For Domain – Select this feature to stop the automatic logon process at boot-up, providing you with an opportunity to select the Domain using a pull down combo box.

DelayAutoDetect after locking Workstation - Once you chose to Lock you workstation, and you have set the AutoDetect while Locked option above, your badge could detect you before you leave the room and cause the workstation to be immediately unlocked. This delay gives you time to leave the area before auto detection begins.

NT GINA

As mentioned earlier, under NT RF IDeas replaces the supplied GINA with an *AIR ID Aware* GINA. The GINA provides the user with the logon and logout dialog screens.

The following choices are available when you press 'Ctrl-Alt-Del' key sequence:

Logout

The selections under this button are as follows:

- Shut down the computer
- Shutdown and power off the computer
- Restart the computer

AIR ID

* Close all programs and log in as a different user

Lock

Selecting this button will lock the workstation or server, allowing it to be opened *only* by the current user shown.

Password

This selection will allow you to change your user password. The password changes will be reflected in the Badge (if available) and the operating system.

TROUBLESHOOTING

If your system is not working it could be for one of the following reasons:

No Base Unit Attached

1. Check to be sure the base unit is plugged in.
2. Verify the **COM Port** selected agrees with the connector on the PC. Refer to Chapter 2-2.3 **Get Base Version** and review this step.

Cannot Locate the Badge

1. It could be the wrong badge
2. The badge is not in the database
3. Battery too low, replace battery

Your Password doesn't work

Your Badge password does not agree with the Database. Refer to change password section and review procedure to set new password (SetPswd).

If you are still experiencing problems, contact RF IDeas Technical support dept:

(888) 542-4743 (8:30 - 5:30 Central Time).

TECHNICAL SPECIFICATIONS

The AIR ID System was development with an open architecture design to allow for further integration. The API Software will be provided to system integrators via The AIR ID Developer Kit.

The AIR ID Base Unit
>   916.5 MHz transceiver
>   Microprocessor
>   DB25 Connector
>   Approximately 3.75"x2.5"x1"
>   FCC ID M9MBU100

The AIR ID Badge
>   916.5 MHz transceiver
>   Microprocessor
>   Coin Cell Lithium Battery (CR2025)
>   Credit Card Size
>   Approximately 3"x2"x1/5"
>   FCC ID M9MMU100

Note: NT users, be aware that your GINA file is going to be replaced. The GINA DLL contains your LOGON procedures and routine for Windows NT. If you are using 3rd party GINA replacements this may cause these other products to function improperly.

Index

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Proximity Activated Identification

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