

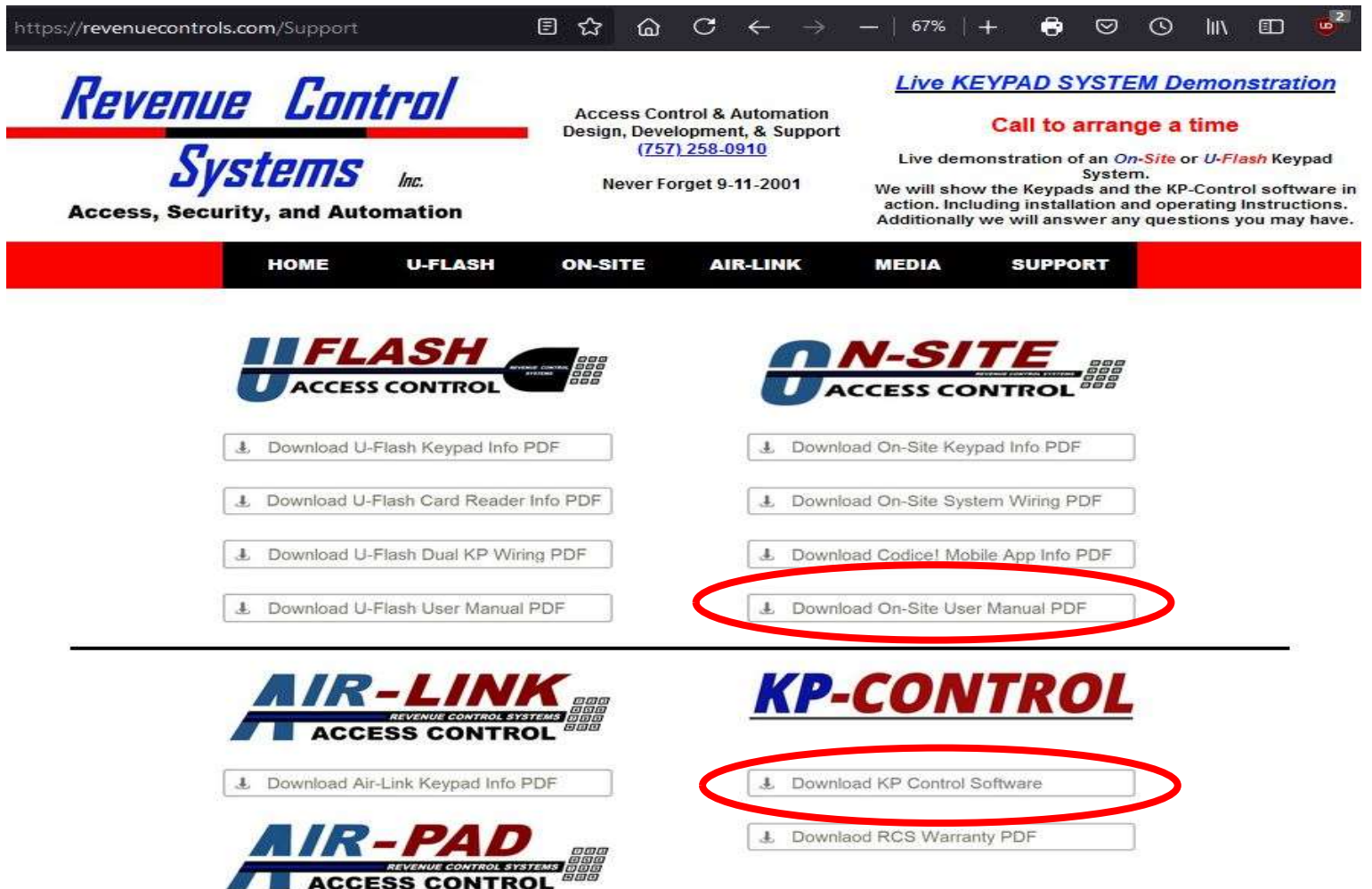
ON-SITE Setup Guide

Thank you for purchasing an **ON-SITE** system. This guide will assist you in the setup any **ON-SITE** system, including **AIR-LINK**, and **CELL-LINK** systems. This system can have either keypads or card readers, when you see “keypad” in this guide, you may substitute “card reader”. The system contains features to support self-storage and parking facility applications. You can call for **FREE** technical support to get help at any time at **757-258-0910**. Please note, as we update and add features to the system software, some of the following procedures may change.

Codes entered into the **KP-CONTROL** software will be downloaded into the System Manager Controller (SYSMAN) through the wired or wireless keypad network. These codes can come from a third party tenant management program or can be entered and managed directly in the **KP-CONTROL** software. The new/updated codes are transferred into the keypad.

Software installation:

The installation files for the **KP-CONTROL** software are on our website at www.RevenueControls.com/Support look for the **KP-CONTROL** banner on the right. To install the software, click the “Download KP Control Software” button and wait for the download to complete, this may take a few minutes if your browser does a virus check. Browse to your downloads folder to find the new file. This is a compressed file and needs to be extracted before you run the setup. Extract the contents of the Setup file by right clicking on the setup file and selecting “extract all”, once extracted, run “Setup.exe” (as administrator if you can). Advance through the installation process by clicking ‘Next’ through the setup prompts. Once the installation has completed start the **KP-CONTROL** software by double clicking on the ‘key-hole’ icon on the desktop. KP-Control will start on its own whenever the computer is restarted. Call us at any time if you need help. The complete installation, setup and Operation Manual can be accessed in the C:\KPcontrol folder on your computer after you complete the installation or by pressing the “Help” button from within the KP-Control program or by downloading it and other documents, and videos from www.RevenueControls.com

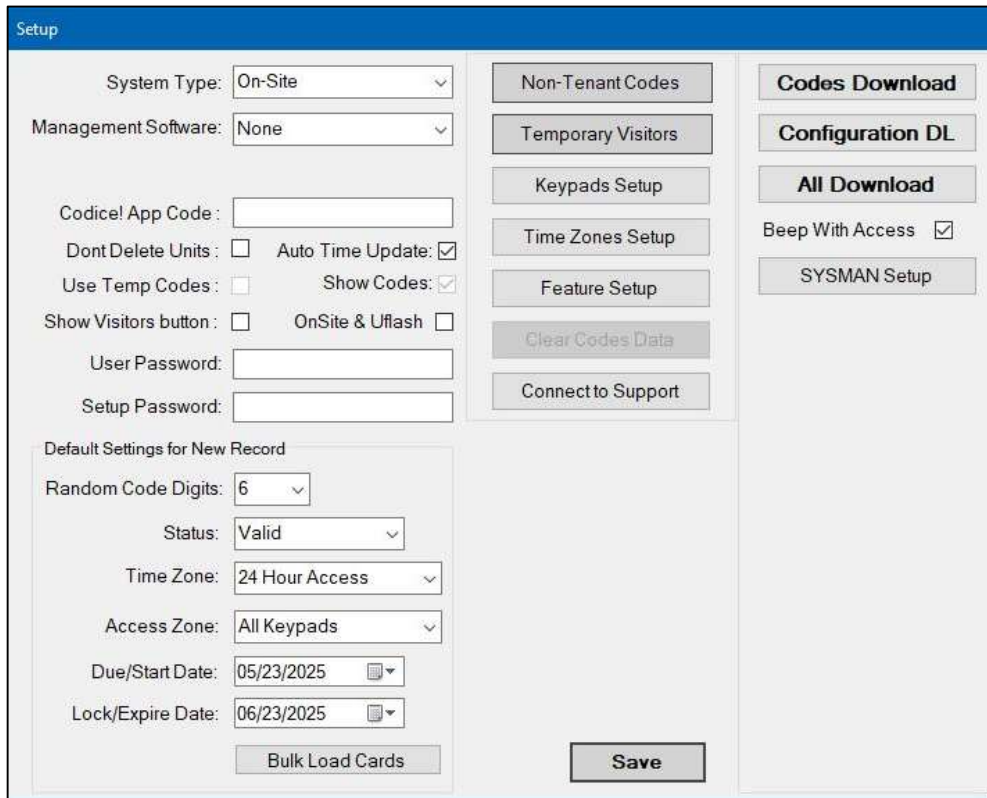


The screenshot shows the website <https://revenuecontrols.com/Support> with a navigation menu: HOME, U-FLASH, ON-SITE, AIR-LINK, MEDIA, SUPPORT. The main content area features several download links for various systems:

- U-FLASH ACCESS CONTROL**
 - Download U-Flash Keypad Info PDF
 - Download U-Flash Card Reader Info PDF
 - Download U-Flash Dual KP Wiring PDF
 - Download U-Flash User Manual PDF
- ON-SITE ACCESS CONTROL**
 - Download On-Site Keypad Info PDF
 - Download On-Site System Wiring PDF
 - Download Codice! Mobile App Info PDF
 - Download On-Site User Manual PDF
- AIR-LINK ACCESS CONTROL**
 - Download Air-Link Keypad Info PDF
- KP-CONTROL**
 - Download KP Control Software
 - Download RCS Warranty PDF

The download links for "Download On-Site User Manual PDF" and "Download KP Control Software" are circled in red in the original image.

System Configuration:



The screenshot shows the 'Setup' configuration page. On the left, there are input fields for 'System Type' (set to 'On-Site'), 'Management Software' (set to 'None'), 'Codice! App Code', 'Dont Delete Units', 'Auto Time Update' (checked), 'Use Temp Codes', 'Show Codes' (checked), 'Show Visitors button', 'OnSite & Uflash', 'User Password', and 'Setup Password'. Below these is a 'Default Settings for New Record' section with fields for 'Random Code Digits' (6), 'Status' (Valid), 'Time Zone' (24 Hour Access), 'Access Zone' (All Keypads), 'Due/Start Date' (05/23/2025), and 'Lock/Expire Date' (06/23/2025). On the right, there is a vertical column of buttons: 'Non-Tenant Codes', 'Temporary Visitors', 'Keypads Setup', 'Time Zones Setup', 'Feature Setup', 'Clear Codes Data', and 'Connect to Support'. To the right of these buttons are three larger buttons: 'Codes Download', 'Configuration DL', and 'All Download'. Below these are two checkboxes: 'Beep With Access' (checked) and 'SYSMAN Setup'. At the bottom right is a 'Save' button.

Click the “**Setup**” button on the right. This is where you will select specific preferences for the **ON-SITE** system.

System Type:

Select ‘On-Site’ under the ‘System Type’ option box. “On-Site” is for any **ON-SITE** system, including **AIR-LINK**, and **CELL-LINK** systems. These keypad systems use a “SYS-MAN” System Manager to send the codes to the keypad. “UFLASH” is for keypads which use a USB flash drive to load the codes into the keypad.

Management Software:

The next option box, ‘Management Software’ is only used in Self-Storage applications that use an optional third party ‘invoicing’ program. **KP-CONTROL** has two modes of operation. If you are using a third party tenant management program, **KP-CONTROL** may be able to accept your tenant codes directly from it without having to re-enter the tenant data into **KP-CONTROL**. In this configuration you cannot edit the tenant information in the **KP-CONTROL** software. If no “management program” is used select “None”. You can then enter the user data directly into the **KP-CONTROL** software, add, delete and edit tenant/user information. In either configuration **KP-CONTROL** keeps track of the unit/account number, name, code, expiration date, time zone, status and the activity log.

Codice!:

Optional phone app, call us for the activation code if applicable

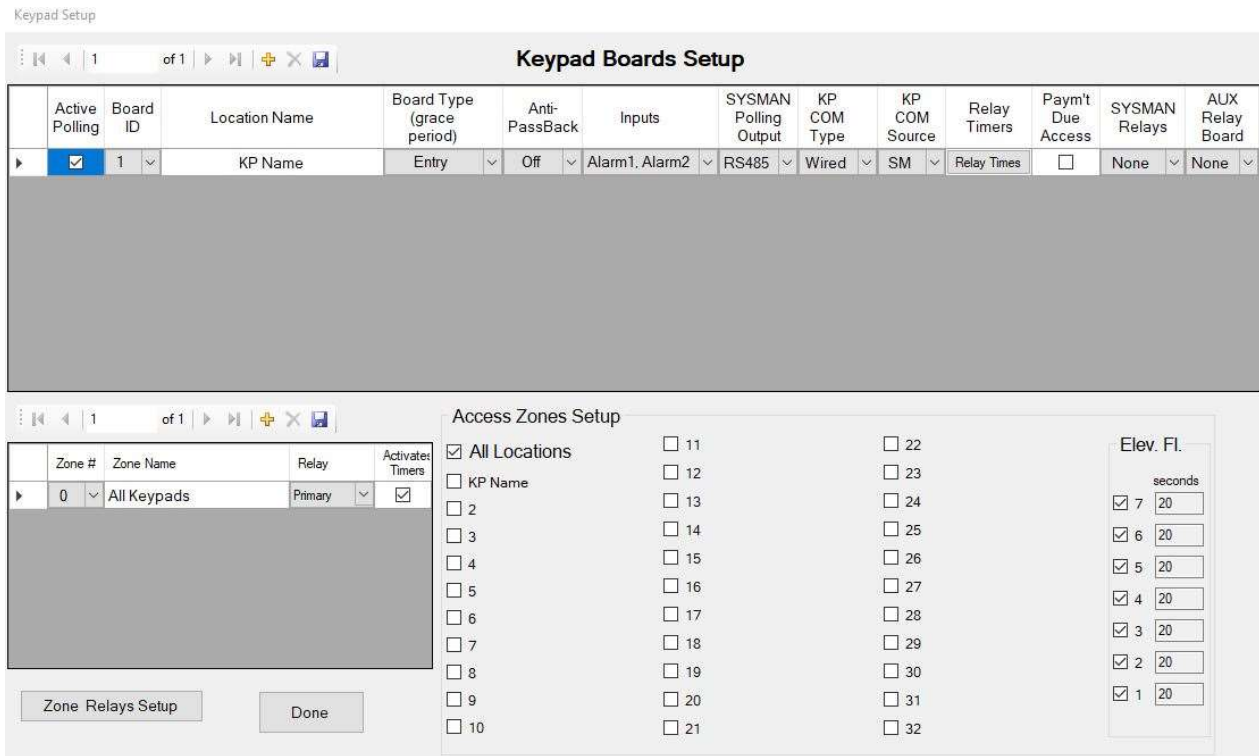
User Password:

Locks data entry behind a password login

Setup Password:

Locks setup screen behind a password login

Select the “**Keypads Setup**” button: use this window to program in the keypad setup. Be sure to click the save icon when finished with each keypad edit. When finished in this screen, you can hit the “Done” button. If the system is online, a download will start.



- Active:**
Enables or Disables polling a specific keypad. If this check box is not checked, the system will not poll that keypad.
- Board ID:**
Each keypad must have a unique board address from 1 to 32
- Location Name:**
Each keypad must have a unique name up to 20 characters. Avoid special characters (*, /, \$, etc.).
- Board Type:**
Entry and Exit keypads are used for anti-passback and user on site features. Exit keypads can have a grace period, noted by the (Grace Period).
Nested Entry and Exit types are used for nested anti-passback
Relay boards are used for elevator or relay control
- Anti-Passback:**
Off - No anti-passback control
Soft - Records passback violation, but still grants entry
Hard - Records passback violation and denies entry
Timed- Passback allowed after a period of time set in the “Anti-Passback” screen
- Inputs:**
Sets the function of Inputs 1 and 2 on each keypad
Ex: To set Input 1 as an alarm and Input 2 as Egress, use “Alarm1,Egress”

Alarm - Keypad generates alarm message when input is active
Arming- Keypad cannot be used unless the input is active
Egress- Fires the primary relay
- SYSMAN Polling Output:**
Select which interface the SYSMAN will use to poll for this keypad. For RS485 output, select “RS45”, for wireless output, select “AirLink”. For AirLink keypads, refer to Sysman setup.
- KP COM Type:**
Match this to the identical setting in the keypad.
- KP COM Source:**
Select where the keypad will be getting its communications from. If there are no repeaters in the system, select “SM” if the keypad is getting its communications repeated to it from another keypad, select the ID of the repeater here.

Relay Timers:

The "Relay Times" button is used to automatically activate the relay on the keypad at the times you choose. The keypad can un-lock the gate up to twice a day. To disable a timer set its start and end times to "12:00 AM".

Paym't Due Access:

Check if users are allowed access when in payment due status.

Sysman Relays:

Select a relay to fire on the Sysman when the keypad grants entry.

Aux Relay Board:

Select a board address to fire a relay on when the keypad grants entry

Access Zones Setup:

Access Zones are used to control which keypads the users will have access to. Access Zone "0" is setup for all keypads. You can create as many "Access Zones" as you need to control who has access to which keypads. Select an access zone to edit in the box on the left, or add new ones with the plus icon. Assign which keypads are in the zone by checking them on the right. Relay column selects which relay to fire on the keypad for each access zone. You assign the "Access Zone" to the tenants on the main screen.

Zone Relays Setup:

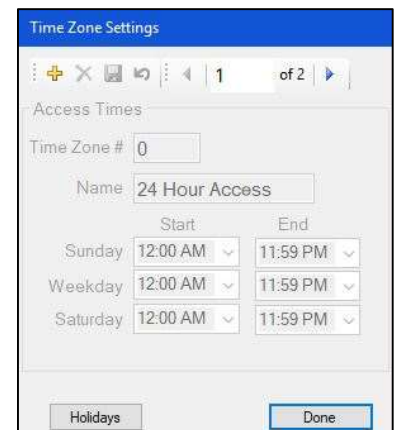
Only used with relay boards

Click 'Done' to return to the main Setup screen. If the Sysman is online, a download will start automatically

Time Zones:

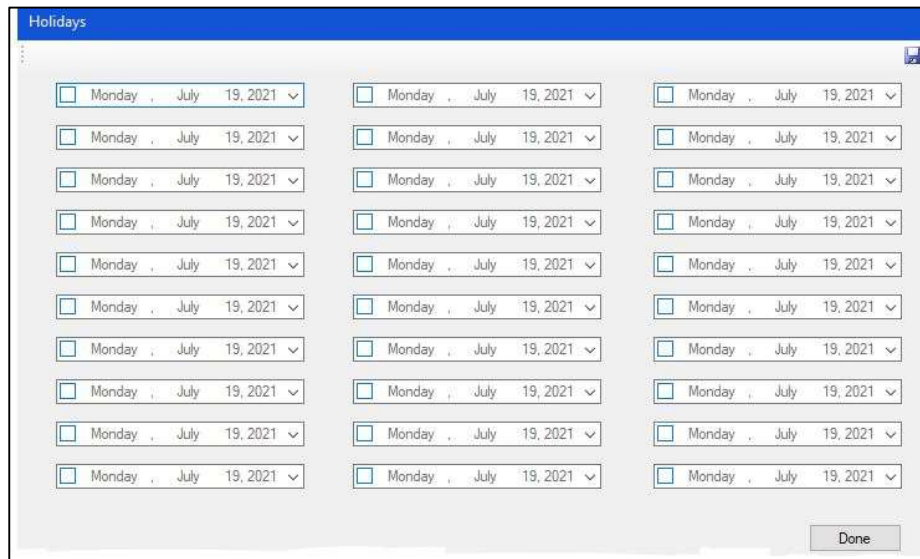
A Time zone is a list of the days of the week (Sunday, Weekday and Saturday) and times that codes will be accepted. These time zones must be the same as the time zones setup in your tenant management program. Time zone "0" is a 24-hour, always active time zone and cannot be changed. Time zone "1" is Standard Hours that you can set.

Select the "Time Zones" button: use this window to program in the times the codes are OK to use. You may have several Time Zones to allow different groups of users different access times. You may add more time zones if you wish with the plus icon. You assign the "Time Zone" to the tenants on the main screen.



Holidays:

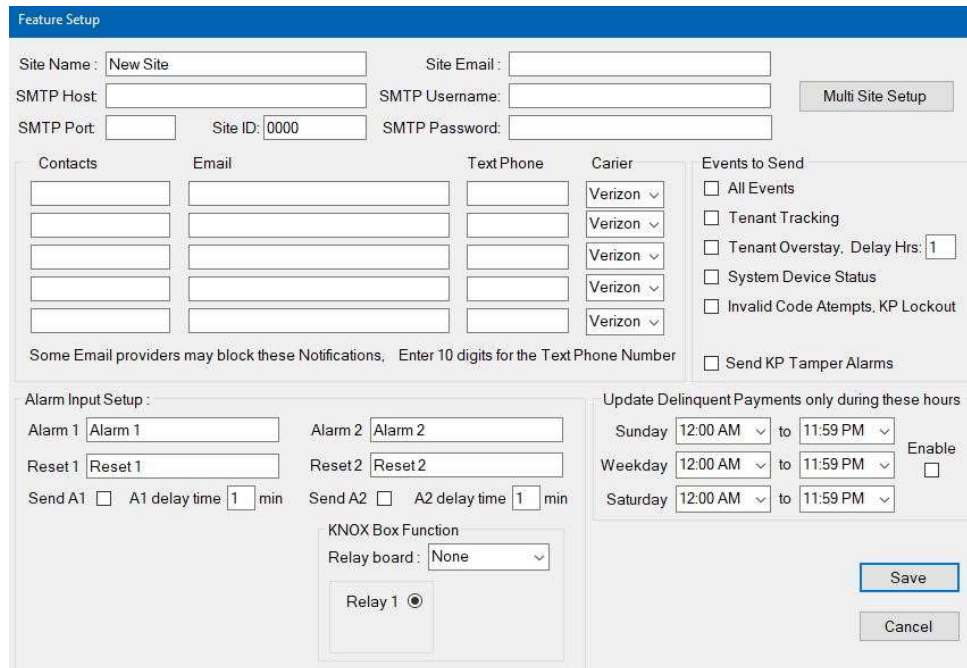
Specific days can be selected to either hold the gates open or lock them closed. The relay timers are also suspended when a holiday is active. A setting in the keypad is used to set if the gates will open or lock. Users with VIP access will still be able to enter. When finished with this screen, click "Done" to return to the time zones screen.



When finished with time zones, click "Done" to return to the main Setup screen.

Feature Setup:

This screen is used for setting up various features in the system, including alert SMS / Emails, alarm names, and multiple Sysman support. These features are all optional.



The screenshot shows the 'Feature Setup' web interface. It includes fields for Site Name (New Site), Site Email, SMTP Host, SMTP Username, SMTP Port, Site ID (0000), and SMTP Password. There is a 'Multi Site Setup' button. Below these are sections for 'Contacts' (with columns for Email, Text Phone, and Carrier), 'Events to Send' (with checkboxes for All Events, Tenant Tracking, Tenant Overstay, System Device Status, Invalid Code Attempts, KP Lockout, and Send KP Tamper Alarms), 'Alarm Input Setup' (with fields for Alarm 1, Alarm 2, Reset 1, Reset 2, and Send A1/A2 delay times), and 'Update Delinquent Payments only during these hours' (with time selection for Sunday, Weekday, and Saturday). There is also a 'KNOX Box Function' section with a 'Relay board' dropdown and a 'Relay 1' radio button. 'Save' and 'Cancel' buttons are at the bottom right.

Site Name: Name of the site which displays at the top of the KP-Control window, as well as in SMS / Email notifications.

Site Email: The email address that the system will use to send SMS / Email notifications.

SMTP Host: The SMTP Host server for the site email, note, some email providers may block these emails.

SMTP Port: The SMTP outgoing email port for the site email.

SMTP Username: The username used to log into the site email account.

SMTP Password: The password used to log into the site email account.

Contacts: List of SMS / Email notification recipients, you can use email, phone, or both. Be sure to select the correct carrier for text phone number and use all 10 digits. Note, some email providers may block these notifications as spam.

Events to Send: Select which system events to send as SMS / Email notifications.

All Events – Sends all incoming transactions.

Tenant Tracking – Sends alerts when specific tenants enter their code on an entry keypad.

Tenant Overstay – Sends alerts when a tenant is on site more than the specified number of hours.

System Device Status – Sends alerts when system equipment goes online or offline.

Invalid Code Attempts – Sends alerts when 4 incorrect codes are entered in a row.

Send Tamper Alarms – Sends alerts when keypad tamper alarms are triggered.

Alarm Input Setup: Name alarm events for display in transaction log and SMS / Email notifications. Checking “Send A1/A2” will send alerts when these alarms stay in alarm status for more than the delay time. (Ex. Alarm 1 used as a gate stuck open alert. Alarm1 is named ‘Gate Open’, Reset 1 is named ‘Gate Closed’. When a gate open signal is wired to the keypad alarm 1 input, this will send the contacts a notification if the gate is open longer than the specified A1 delay time. Then send another notification when the gate closes again.)

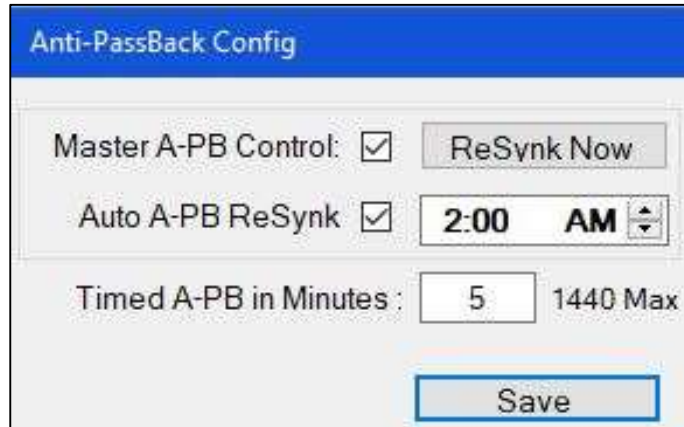
Update Delinquent Payment Hours: Only updates delinquent tenants to current status during these hours.

Multi Site Setup:

This screen is used for facilities that manage multiple sites with Sysmans from one computer. These sites can either have independent user databases or share a common user database. Call us for help setting this up.

Anti-PassBack:

You can use the Anti-Passback function to stop codes and cards from being used again within a selectable time period. This is great for parking lots. If you do not need this function set the time to "0" minutes. With the Entry and Exit keypads you can activate HARD anti-passback in which you must use an entry keypad then an exit keypad in that order, otherwise the code will not work. Anti-Passback must be enabled in the keypad setup for these settings to be used.



Anti-PassBack Config

Master A-PB Control: ReSynk Now

Auto A-PB ReSynk 2:00 AM

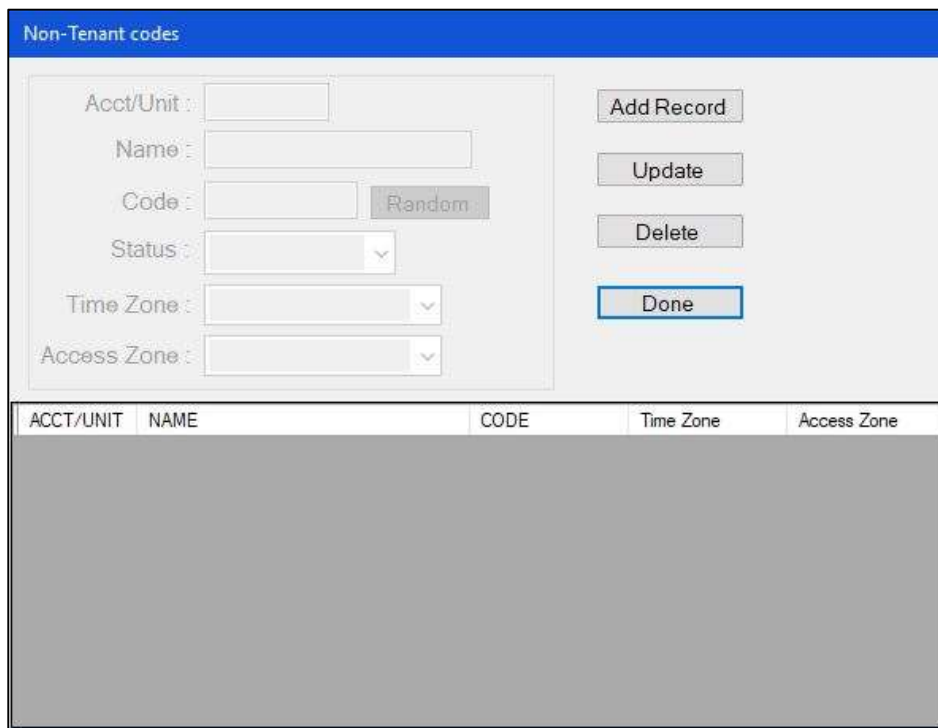
Timed A-PB in Minutes: 1440 Max

Save

Click "Save" to return to the main Setup screen.

Non-Tenant Codes:

This screen is for entering codes for maintenance and other personnel that do not pay rent but need access on a regular basis. i.e. trash pickup and lawn care. Click "Add Record" and input the user data on the left, when finished, click save. The non-tenant user will appear in the bottom section. To edit a non-tenant user, click on the record in the bottom section, and change the information in the top section, then click update. To delete a user, click on the record in the bottom section, and press the delete button.



Non-Tenant codes

Acct/Unit :

Name :

Code : Random

Status :

Time Zone :

Access Zone :

Add Record

Update

Delete

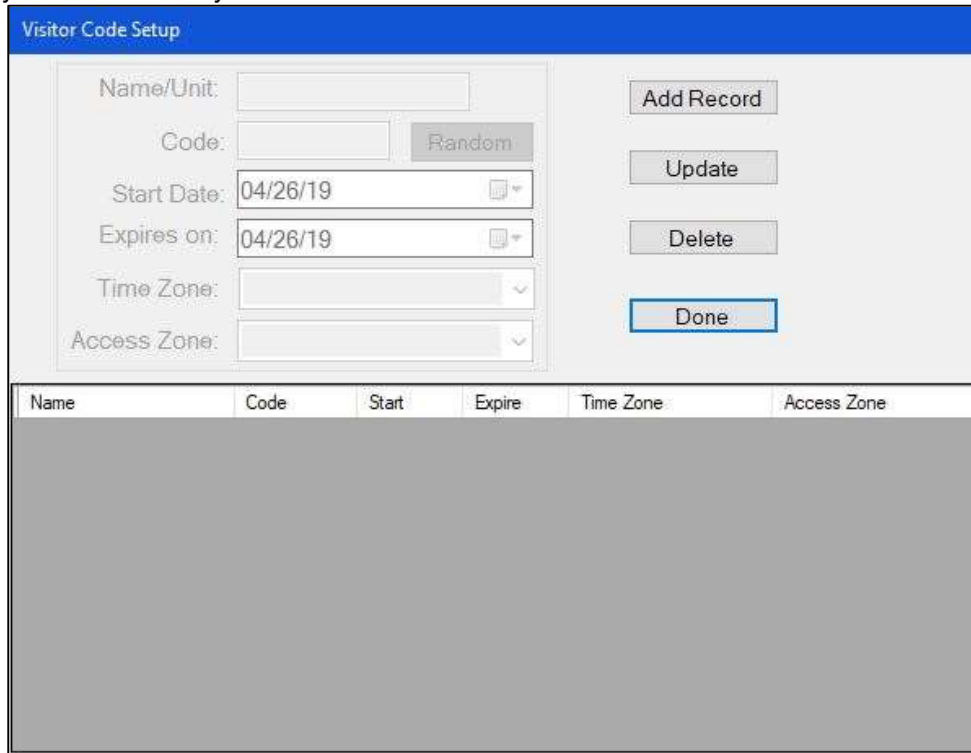
Done

ACCT/UNIT	NAME	CODE	Time Zone	Access Zone

Click "Done" to return to the main setup screen.

Visitors:

Similar to Non-Tenants, this screen allows user entry, but these users will automatically expire on a specified date. This is especially useful for self-storage auction buyers who will have access to the facility for a few days after purchasing a unit. The keypad display will show the user the text in the Name/Unit field, then the expiration date. This keeps the user aware of when they have to be out by.



The screenshot shows a software interface titled "Visitor Code Setup". It features a form with the following fields and controls:

- Name/Unit:** A text input field.
- Code:** A text input field with a "Random" button next to it.
- Start Date:** A date picker showing "04/26/19".
- Expires on:** A date picker showing "04/26/19".
- Time Zone:** A dropdown menu.
- Access Zone:** A dropdown menu.
- Buttons:** "Add Record", "Update", "Delete", and "Done".

Below the form is a table with the following columns: Name, Code, Start, Expire, Time Zone, and Access Zone. The table area is currently empty.

Click "Add Record" and input the user data on the left, when finished, click save. The non-tenant user will appear in the bottom section. To edit a non-tenant user, click on the record in the bottom section, and change the information in the top section, then click update. To delete a user, click on the record in the bottom section, and press the delete button.

Click "Done" to return to the main setup screen.

Clear Codes Data:

Only active if using a management program, this button deletes all user code data, except for visitors and non tenants.

Codes Download:

Downloads user code data to the Sysman.

Configuration DL:

Downloads system configuration data to the Sysman.

All Download:

Downloads system configuration and user code data to the Sysman.

Beep with Access:

Computer will beep when a code is entered on the keypad when this is checked.

SYSMAN Setup:

This shows other settings relating to the SYSMAN connection to the PC and keypad polling.

Sysman Port- Select the COM (USB or 9 pin serial) port that the Sysman is connected on, if using network or internet, scroll up to IP Mode. Auto will search COM ports automatically to find the Sysman, but it will not search for a Sysman connected via network. When IP Mode is selected, the IP & WiFi button will appear below. If the USB COM port is not identified, run the COM port driver installer in the KP Control folder.

SM COM Speed – Speed at which the Sysman communicates with the PC, this can be changed to accommodate slower computers or slow internet connections if connecting to a remote Sysman. Normal setting is good.

IP & WiFi – Used to configure IP settings for Sysmans connected via network, including remote WAN, LAN, and WiFi (only shows when Sysman Port is set to IP Mode)

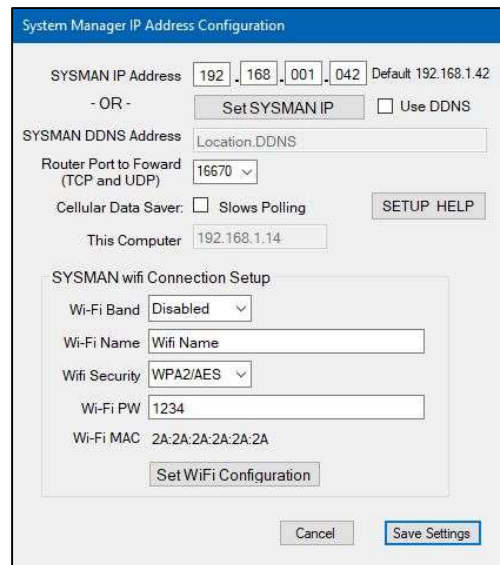
SYSMAN Address: Desired IP of Sysman
 Set SM IP: Sets IP of Sysman, it must be on the network
 SYSMAN DDNS Address: Contact us to configure DDNS if required, Use DDNS must be checked
 Router Port: Select the desired port you wish to use
 Cellular Data Saver: Slows the SYSMAN polling interval
 This Computer: Shows the IP of the computer you are using

Further help is available in the Setup Help button

WiFi Settings: Sysman must be online to change these

WiFi Band: 2.4 or 5 GHz, match with settings in router
 WiFi Name: Avoid special characters, match with router
 WiFi Security: Match with router
 WiFi PW: Avoid special characters, match with router
 WiFi MAC: May be needed for MAC filtering

Set WiFi Config: Sysman must be online to change these settings



System Manager IP Address Configuration

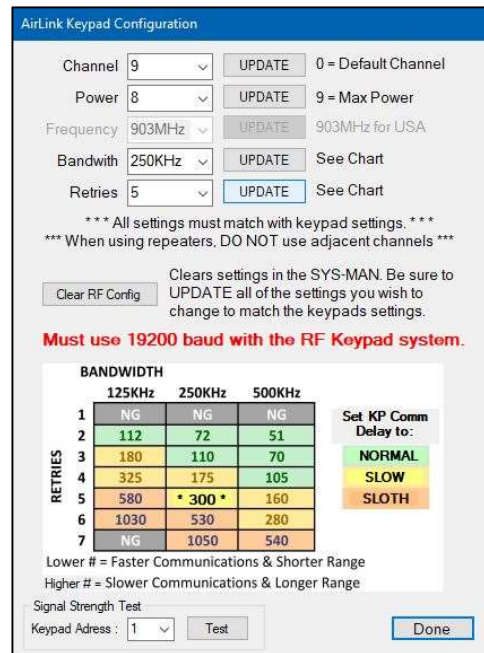
SYSMAN IP Address: 192.168.001.042 Default 192.168.1.42
 -OR- Set SYSMAN IP Use DDNS
 SYSMAN DDNS Address: Location.DDNS
 Router Port to Forward (TCP and UDP): 16670
 Cellular Data Saver: Slows Polling SETUP HELP
 This Computer: 192.168.1.14
 SYSMAN wifi Connection Setup
 Wi-Fi Band: Disabled
 Wi-Fi Name: Wifi Name
 Wifi Security: WPA2/AES
 Wi-Fi PW: 1234
 Wi-Fi MAC: 2A:2A:2A:2A:2A:2A
 Set WiFi Configuration
 Cancel Save Settings

Keypad Baud – For systems with AirLink keypads this MUST be 19200. Smaller systems use 9600 by default. Recommend using 19200 for systems with more than 15 keypads.

KP Comm Delay – How long the Sysman waits for a response from each keypad. For AirLink Keypads this setting must be adjusted to match the wireless communication settings. May need to be slower if using RS485 to ethernet converters. Fast is good for standard wired systems.

RF Keypads – Settings for wireless communications from Sysman to AirLink keypads.

Channel – Choose any. Must match keypad
 Power – Wireless transmit power
 Frequency – 903 for USA. Cannot be changed
 Bandwidth – Higher is faster but low range, see chart. Must match keypad
 Retries – Lower is faster but less stable, see chart. Must match keypad
 Clear RF Config – Clears RF settings in Sysman
 Signal Strength Test – Retrieves signal strength from a specified online keypad



AirLink Keypad Configuration

Channel: 9 UPDATE 0 = Default Channel
 Power: 8 UPDATE 9 = Max Power
 Frequency: 903MHz UPDATE 903MHz for USA
 Bandwidth: 250KHz UPDATE See Chart
 Retries: 5 UPDATE See Chart
 *** All settings must match with keypad settings. ***
 *** When using repeaters, DO NOT use adjacent channels ***
 Clear RF Config Clears settings in the SYS-MAN. Be sure to UPDATE all of the settings you wish to change to match the keypads settings.

Must use 19200 baud with the RF Keypad system.

		BANDWIDTH			Set KP Comm Delay to:
		125KHz	250KHz	500KHz	
RETRIES	1	NG	NG	NG	NORMAL SLOW SLOTH
	2	112	72	51	
	3	180	110	70	
	4	325	175	105	
	5	580	* 300 *	160	
	6	1030	530	280	
	7	NG	1050	540	

Lower # = Faster Communications & Shorter Range
 Higher # = Slower Communications & Longer Range
 Signal Strength Test
 Keypad Address: 1 Test Done

For AirLink keypad wireless communication configuration, it is best to **CALL US**, we are always available. **757-258-0910**

Every AirLink keypad can act as a wire to air or air to wire repeater, these settings are configured in each keypad. Note that every wireless communication link will increase the latency of the system. As more wireless links are added, the keypads will take longer to respond to user input.

Reduce Messages – Eliminates debug messages from event log
 SM Relay Timers – Automatic Timers for Sysman relays

The Sysman relays can be named here and their activation time can be set. They can un-lock the gate up to twice a day. To disable a timer set its start and end times to "12:00 AM".

Counters – Used to configure counts for each keypad along with Lot Full signs.

Tools – Opens tools for rebooting the Sysman and testing the battery backup

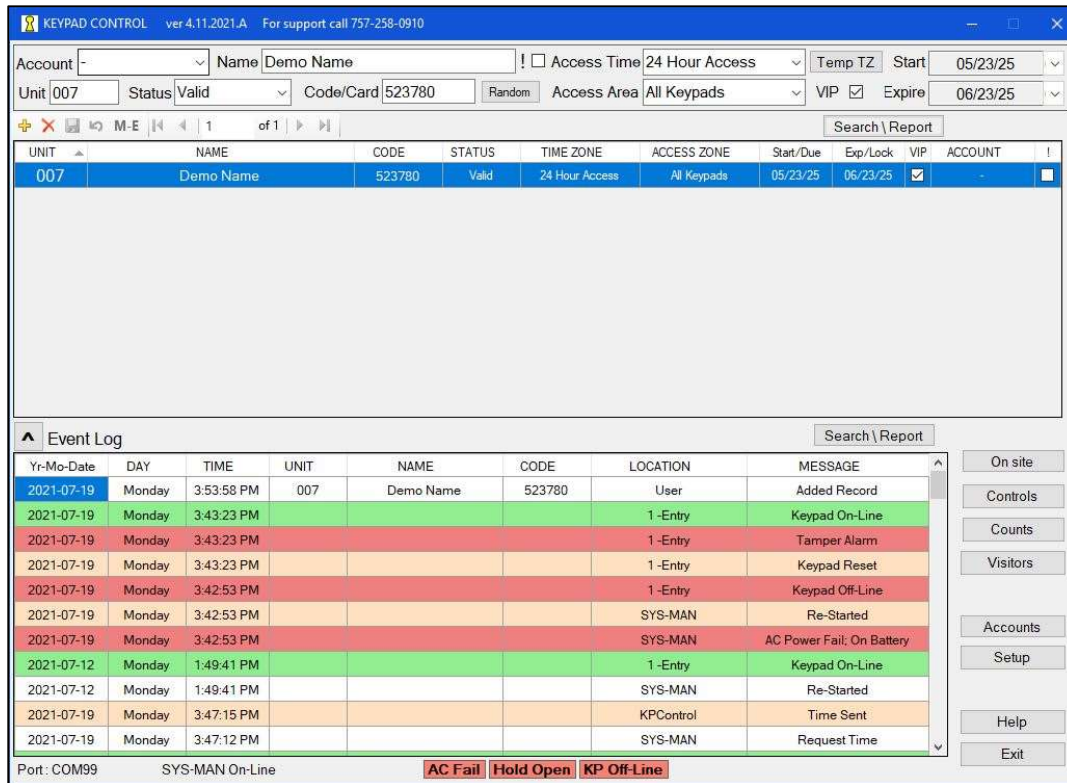
Main Screen

Dependent on which **KP-CONTROL** software Setup is used, some buttons may be disabled.

For systems that are using a third party “management” program, controls will act the same, except for the following: You can’t add, delete or edit user information in the fields on top of the screen. These fields cannot be edited in this mode.

Below these fields is the tenant list grid, which lists all the tenants in the system. All the information in this grid comes from the tenant management program or is entered manually.

Along the top of the screen are fields displaying the tenant information. To add a new user, use the “+” button.



The screenshot shows the 'KEYPAD CONTROL' software interface. At the top, there's a title bar with the version 'ver 4.11.2021.A' and support contact '757-258-0910'. Below the title bar is a form for user setup with fields for Account, Name (Demo Name), Access Time (24 Hour Access), Temp TZ, Start (05/23/25), Unit (007), Status (Valid), Code/Card (523780), Random, Access Area (All Keypads), VIP (checked), and Expire (06/23/25). Below the form is a table with columns: UNIT, NAME, CODE, STATUS, TIME ZONE, ACCESS ZONE, Start/Due, Exp/Lock, VIP, ACCOUNT, and !. The table contains one row for '007 Demo Name'. Below the table is an 'Event Log' section with columns: Yr-Mo-Date, DAY, TIME, UNIT, NAME, CODE, LOCATION, and MESSAGE. The event log shows several entries from 2021-07-19 and 2021-07-12, including 'Added Record', 'Keypad On-Line', 'Tamper Alarm', 'Keypad Reset', 'Keypad Off-Line', 'Re-Started', and 'AC Power Fail: On Battery'. At the bottom of the event log, there are status indicators: 'AC Fail', 'Hold Open', and 'KP Off-Line'. On the right side of the event log, there are buttons for 'On site', 'Controls', 'Counts', 'Visitors', 'Accounts', 'Setup', 'Help', and 'Exit'.

Account: Users can be assigned to an account for organization. This field is not required, but is useful for grouping users and sorting in reports. Accounts are set up in the “Accounts” button in the lower right.

Name: Every user must have a name, they do not have to be unique, avoid special characters (*, \$, /, etc).

!: This check box will alert the tenant to see the manager when they enter their code on the keypad.

T: This check box will alert the manager when the selected tenant uses an entry keypad

Access Time: Select which “Time Zone” (schedule) the user will have access during.

Access Area: Select which “Access Zone” (keypad group) the user will have access to.

Temp TZ: This button allows the manager to assign users temporary time zone privileges which will automatically expire back to the users standard time zone. This is useful for allowing new tenants to move in late/after hours.

Unit: 6 characters to use to identify the users unit number. This field is not required, but can be used for any designation the manager desires. It is useful for sorting reports and grouping users. Avoid special characters.

Status: You can use this field to control the users’ access and display their payment status on the keypad screen. Or this field can be used to activate the auto expire function. Every status is subject to the Access Time and Area selections.

Vacant – Used to input vacant units with no tenant data.

Current – Code will grant access as long as the current date is before the Due and Lock Out dates. When the Due date passes, the status will be changed to Payment Due

Payment Due – Keypad will display “Payment Due – “ and either “Access” or “Denied” depending on keypad config. When the Lock Out date passes, the status will be changed to Locked Out

Locked Out – Code will not grant access and keypad will display “Locked Out”

Auto Expire - Code will grant access as long as the current date is between the start and expire dates. Visitors will show up as this status.

Valid – Code will always grant access.

Latch Code – Code will latch the gate open until any latch code is entered again. Latch codes are only valid between the Start and Expire dates

- Code/Card:** 1 to 10 digits, each code must be unique. If desired the manager can click the random button to have a randomly generated unique code generated. We recommend 6 digit codes minimum.
- VIP:** Users with VIP checked will have access during holidays and when the keypads are in "Locked Out" mode. They are also not subject to anti-passback rules in parking facility applications.
- Start/Due:** This field changes between start and due depending on the status field, the statuses that use this field are listed above. Consult the "Status" section for more information.
- Expire/Lock Out:** This field changes between Expire and Lock Out depending on the status field, the statuses that use this field are listed above. Consult the "Status" section for more information.
- User Record Controls:** Making any changes to the user database enters Edit Mode. While in edit mode, some buttons are disabled until either Save or Undo is pressed to exit Edit Mode.
 - +**: Add user
 - X**: Delete user
 - Save**: Save changes
 - Undo**: Undo changes
 - M-E**: Multi Edit allows editing of more than one user at the same time, click multi edit, then select the users to be edited while holding the control key

Search/Reports of User Records: By clicking the "Search\Report" button in the top right of the user list, search mode is entered. In this mode, you can search for specific users, or groups of users and generate printable reports. The top section of the program becomes the search criteria, an example is shown below. In this example, we search for all users that have a Unit that contains the letter "A". Clicking "Run Search" turns the blue and white user list into the search results. A report can be made and printed by clicking the "Make Report" button". To exit search mode and get back to the live view, click "Done".

UNIT	NAME	CODE	STATUS	TIME ZONE	ACCESS ZONE	Start/Due	Exp/Lock	VIP	ACCOUNT
A39	CARD-14568	14568	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14569	14569	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14570	14570	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14571	14571	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14572	14572	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14573	14573	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14574	14574	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14575	14575	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14576	14576	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
A39	CARD-14577	14577	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		

UNIT	NAME	CODE	STATUS	TIME ZONE	ACCESS ZONE	Start/Due	Exp/Lock	VIP	ACCOUNT
167	CARD-6598	6598	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6599	6599	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6600	6600	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6601	6601	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6602	6602	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6603	6603	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6604	6604	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6605	6605	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6606	6606	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		
167	CARD-6607	6607	Valid	24 Hour Access	All Keypads	05/23/25	06/23/25		

Event Log: Below the user list grid is the activity list grid, which the system activity information is uploaded from the Sysman. This section lists all the events that happen in the system, including actions taken in the software. The columns can be sorted by clicking on the column header. Clicking the carrot ^ on the top left of the log will return to default newest on top sorting. The manager can create a note in this section by double clicking anywhere in the event log.

A manager note dialog box will pop up with several fields that the manager can fill in if desired. None of the fields are required to generate a note. By clicking save, a green manager note line is added to the top of the event log. If the manager wishes to cancel the note, click the X.

Input Manager Note

Message

Name

Unit

Code

Save

Search\Reports of Event Log: Similar to the user list, the event log has a "Search\Report" button in its top right corner. This can be used to search the activity on the system and generate printable reports. When in transaction search mode, the user list becomes the search criteria, and the event log becomes the search results. Click done to return to live view.

System Status Bar: The bar at the very bottom of the window contains information about the current status of the system. From left to right, the status information is as follows.

Sysman Connection - Port/IP address/DDNS address and online status If the Sysman is offline, the system will not behave properly.

AC Fail – Alerts that the system is running on battery backup.

Hold Open – Alerts that the manager has a hold open command active

KP Offline – Alerts that one or more keypads is offline

These alerts update roughly every 60 seconds. Right clicking on the alerts will clear them.

On the right hand side of the screen are the following buttons:

Onsite: This button allows you to keep track of all users currently on the site. If you are only using entry keypads, the log will be cleared at 12am each day.

Controls: Here is where you can manually open and control gates. This screen also shows the online status for each keypad, as well as the current status for each keypad relay and the Sysman relays.

LOCATION	STATUS	RELAY 1	RELAY 1 COMMAND	RELAY 2	RELAY 2 COMMAND
Entry	?	Held Open	SELECT COMMAND	Timer: Off	SELECT COMMAND
Exit	?	Timer: Closed	SELECT COMMAND	Timer: Off	SELECT COMMAND

Select a RELAY and a COMMAND then press the APPLY button.

Apply / Update Done

Counts: This button shows the current counts and lot full status. This button only shows if counts have been configured in the setup screen. This feature is used in parking facility applications.

Visitors: Use this button when you need to allow a visitor access to the site. This button is only enabled if the “show visitors” setting is checked in the setup screen. Otherwise, this button is only in the setup screen.

Accounts: To manage accounts just click the ‘Accounts’ button.

Setup: Refer to the above setup procedures for details.

Help: Help opens this PDF

Exit: This will minimize the program to the system tray (near the windows clock). The system will work as normal while it is running in the system tray. To reopen the program, double click on the keyhole icon in the system tray or right click it and select “Open”. If you double click on the keyhole icon on the desktop while the program is running in the system tray, a notification will pop up to let you know it is already running in the system tray. To fully close the program, click the exit button, then right click on the keyhole icon in the system tray and select “Exit”. A dialog box will appear asking if you are sure you want to exit, click yes, the program is no longer running. When the program is not running, new data from the management program will not be downloaded to the keypads, but the keypad system will still work with the current user data and save the event log.

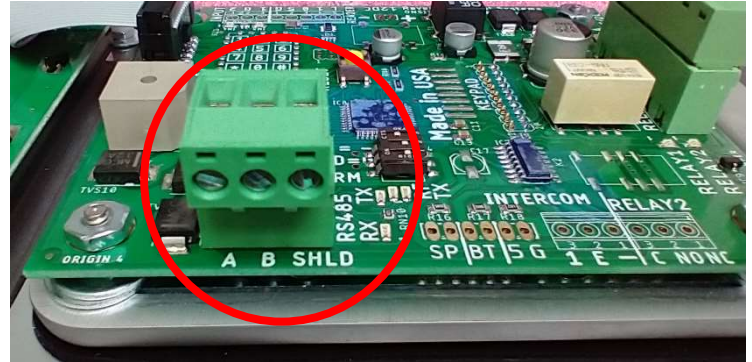
To keep the system up to date when working with online payments from a management program, **KP-CONTROL** must be running with the system manager online 24 hours a day.

We recommend that the manager restart the computer every morning, windows likes this daily refresh and it will help the computer run at peak performance.

We also recommend that the computer be running in full power mode, with hard drives and USB ports set to never sleep, and that the windows clock not be set automatically from the internet. It is best to manually set the clock on this computer.

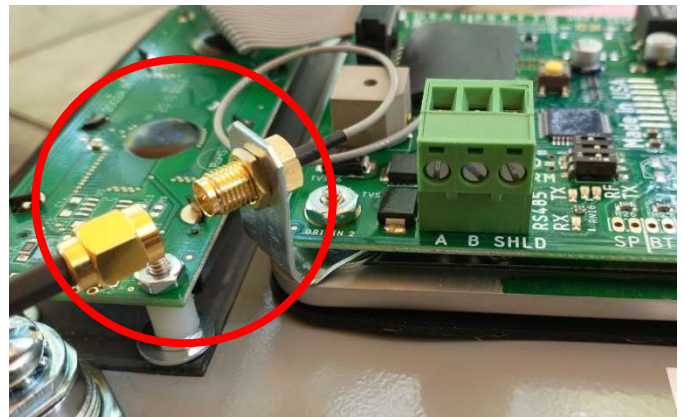
Keypad Communications wiring

The keypad and the SYSMAN will require a wire or wireless connection in order for them to communicate. For wired systems, the proper wire for RS-485 communications is a cable with two individually twisted and shielded pairs. We recommend 18 gauge (Belden 1048A). The wiring should be in a 'daisy chain' topology, dropping off at each keypad location in a continuous loop. You should avoid a 'star' topology. However, in general RS485 is very robust and will most likely work fine under different wiring methods. Usually you can use the existing wiring if replacing an existing system, but if there were problems previously it is a good idea to install new cabling. In either case it is important to have shielded cables. The shield should be connected continuously throughout the cable run. The shield should be connected at each of the keypad boards and also at the SYSMAN. The terminals on the circuit boards are labeled 'A B SHLD'. The 'A' terminal on the SYSMAN will connect to an 'A' terminal on each keypad. Same with the 'B' and 'SHLD' terminals. There is an end of line termination switch next to the communications connector that should be turned on at the SYSMAN and the last keypad on the communications cable run. Additionally there is a 'shield' switch which should be in the off position at each keypad and in the 'on' position at the SYSMAN. There are LED indicators to show the status of the RS-485 communications. If you need more information, please call us.



Wireless Keypad Communication

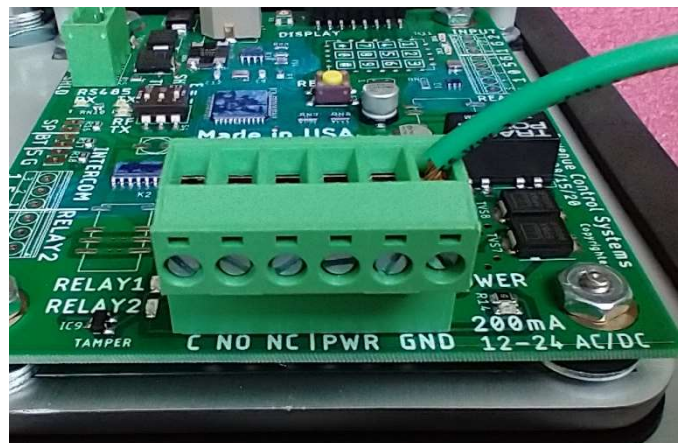
Air-Link wireless keypads can communicate wirelessly or through wires as mentioned above. It is important that the cable from the antenna mounted on the top of the enclosure (gold connector shown in the picture to the right) is connected before powering up the keypad. Wireless communications are configured in the keypad menu screens, which will be covered in detail later. Air-Link keypads can be used as wire to wireless repeaters or as wireless to wired repeaters, if a wireless to wireless repeater is required, this must be specified when ordering to ensure the proper components are included on the circuit board. If a keypad is being used as a wired repeater, refer to the above wiring instructions for the RS-485 wiring, the rest will be configured in the menus. Wireless communications use the 'RF TX' and 'RX' status LEDs next to the RS-485 terminals.



Power and Relay connections

Apply 12-24 volts AC or DC at 300mA to the connector at the bottom of the keypad controller board labeled "PWR" (the two terminals on the right next to the prewired ground). Polarity does not matter. Power can be provided by the Sysman, a gate operator, or an external power supply. Notice the red LED to the right of the connector, this is the power indicator.

Also connect the locking device to this connector. The first three terminals on the left are "C" which is the relay common contact, "NO" is the relay normally open contact, and "NC" is the relay normally closed contact. The unpopulated terminal marked "RELAY2" on the left side of the board are connections for a second relay, only used with an optional second relay. If a second relay is needed, this must be specified when ordering. On the left side of the connector are yellow LEDs which are the relay status indicators.



Card Reader Connections

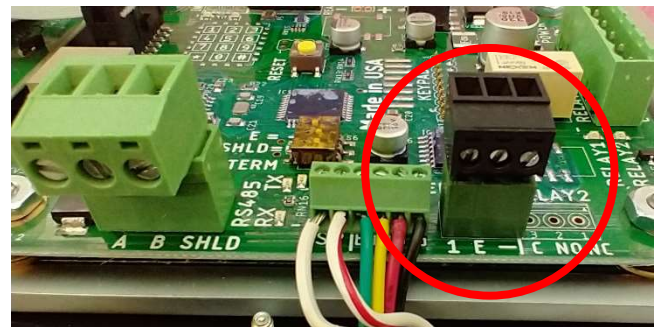
If you are using a card reader, you can connect it to the keypad controller board on the connector marked 'READER'. The connector is located on the right side. The card reader must be a Wiegand 26 bit standard format card reader. The terminals are as follows from left to right: "L" is for the card reader LED, "1" is for the card reader "1" data bit, "0" is for the card reader "0" data bit, "5" is a 5VDC supply to the card reader, "G" is for ground connection, and "12" is a 12VDC supply to the card reader. If the keypad came with a card reader, this wiegand port will be used, and will not be available. If a wiegand port is needed, this must be specified when ordering.



Intercom Connections

Intercoms will wire into the connector labeled 'INTERCOM' on the left side of the circuit board. The intercoms can be 2 or 3 wire style. The Aiphone LEF series works well. The intercom wires will connect to '1', 'E', and ' - '. The prewired speaker and button will not need to be touched.

Revenue Control Systems does not supply the intercom base station.



Miscellaneous Adjustments

If needed, these items can be used.

LCD Contrast Adjustment Pot Being careful with a fine screwdriver, you can adjust display contrast.

Reset Button Resets keypad CPU and reboots

Configuration DIP Switches

- E = - When on, intercom 'E' connects to intercom ' - ' Use for 2 wire intercoms.
- SHLD=GND When on, connects SHLD terminal to circuit board ground plane. May help with sites that have communication problems, usually not needed.
- TERM RS-485 Termination resistor. When on, 120 Ohm resistor is put in circuit between 'A' and 'B' RS-485 terminals. This can be used for RS-485 end of line termination. Usually not needed.

Entering the Keypad Setup Menu

From the main screen, hold down the Star (*) key for about five seconds. The display will change to "Enter Setup Code". Enter the six-digit setup code (default is 012345) and press the Pound (#) key. Once in Setup Mode the * key will reset a setting to its previous value if it has just been changed or it will jump back to the previous menu item. The # key will advance to the next menu item and save any valid changes.

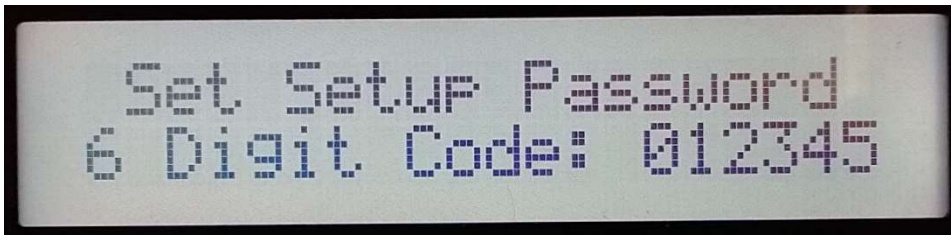


Once you have power to the keypad controller board you can access the setup screen by holding the * key until the display changes to "Enter Setup Code". Enter in the default code of "012345" and press the # key.



Press the # key again.

Setup Password



Enter a six-digit code used for accessing the Setup Menu. The default is 012345.

You can change the Setup Password here or press # to skip over this setting.

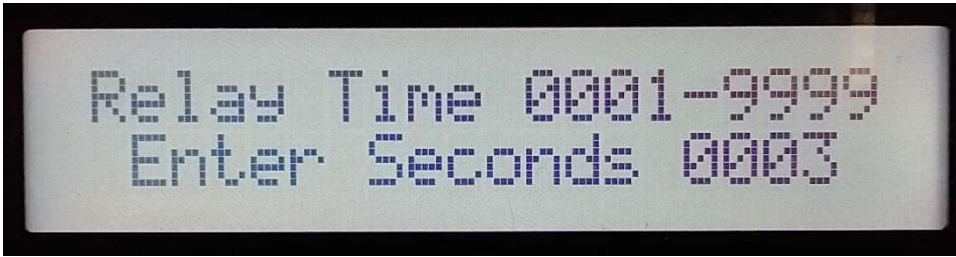
Keypad ID



Enter the keypad identification number from 0-32. This is used to track transactions generated by this keypad in the log report.

Enter in a unique number to identify this controller in the PC software or press # to skip over this setting.

Set Relay 1 Time



Set the amount of time in seconds (0000-9999) that relay 1 will stay activated for when a valid code is entered.

Enter in the number of seconds for the relay to activate on a valid code or press # to skip over this setting.

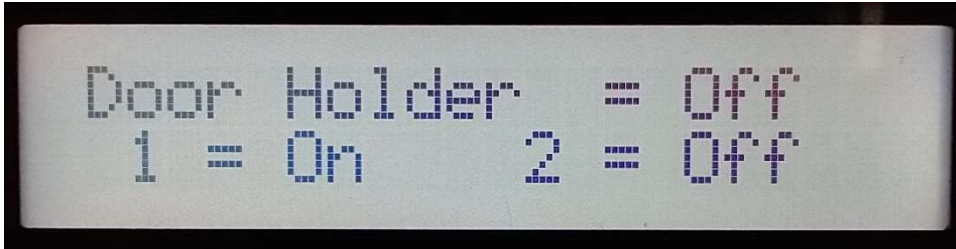
Set Relay 2 Time



Set the amount of time in seconds (0000-9999) that relay 2 will stay activated for when fired.

Enter in the number of seconds for the relay to activate on a valid code or press # to skip over this setting.

Door Holder

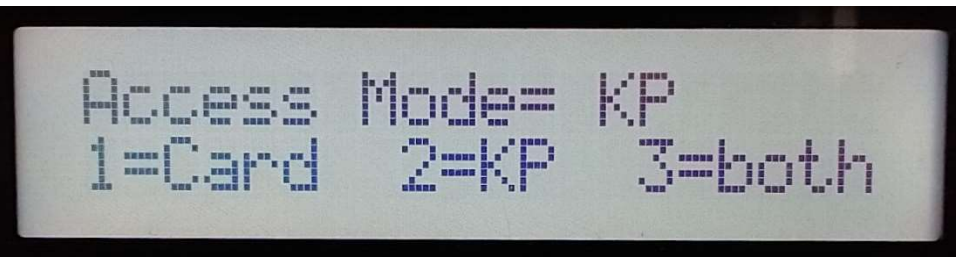


Enable or disable door holder function, fires relay 2 when a valid code is entered.

Enter 1 for on or 2 for off or press # to skip over this setting.

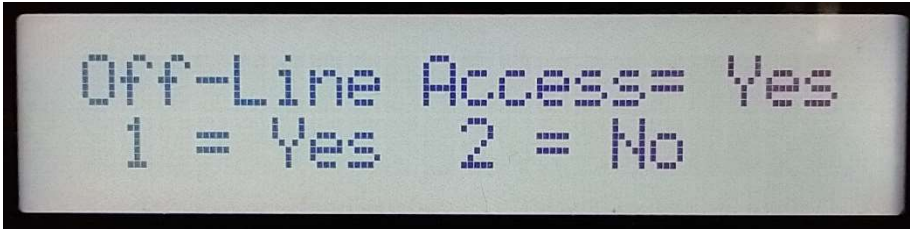
Access Mode

Select if this keypad will use the optional proximity card reader or both cards and keypad operation. If you activate the card reader, the card numbers (as printed on the card) are entered into the PC software without the facility code and without leading zeros. Valid card numbers are from 1 to 65535.



Select which devices you want to activate or press # to skip over this setting.

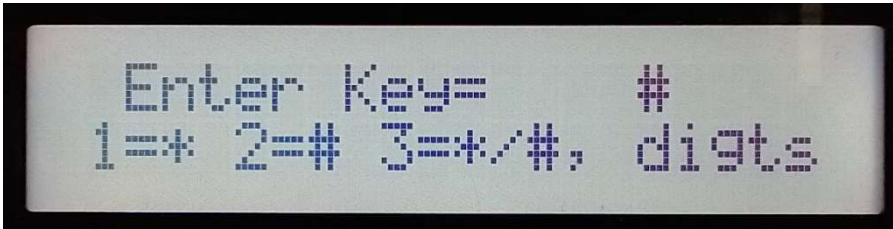
Off-Line Access



If you choose to allow access to your facility when the keypad system is off-line, choose '1' for yes. This would provide a fail-safe in case a problem occurs with the wiring. If you choose 'no' the relay will remain locked.

Enter Key

Select which key is used to enter in a code. You can select " * ", "#", both, or a number of digits. If " * " is selected as the enter key, the # key will become the delete key. If "#" is selected as the enter key, * key will become the delete key. If both are selected, there will not be a delete key. To select a number of digits simply push the number on the keypad, 4 or more. In this mode the keypad will automatically check the code after the specified number of digits are entered, * will behave as delete.



Select which "ENTER" key you want to use. # will always be enter in the setup screens.

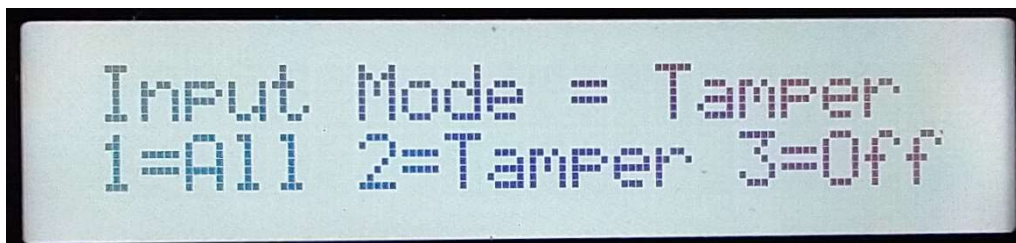
Enforce Cards

When set to "Yes", keypad codes must be from 6 to 10 digits long. If they are less than 6 digits long they will be rejected when entered at the keypad. Codes 1 to 5 digits long are reserved for card numbers (1-65535). When set to "No" codes and card numbers can share all codes and so card numbers can be entered in as codes at the keypad. In either case 65535 is the highest card number that can be used.



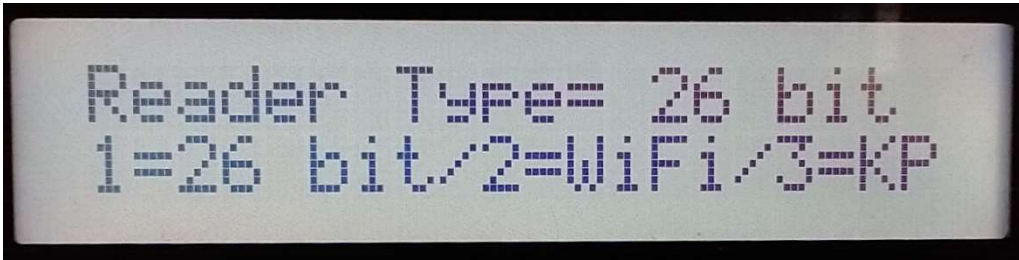
If you are using the card reader and the keypad, you can block keypad code numbers from 1 to 65535, which will only be used for card numbers.

Input Function



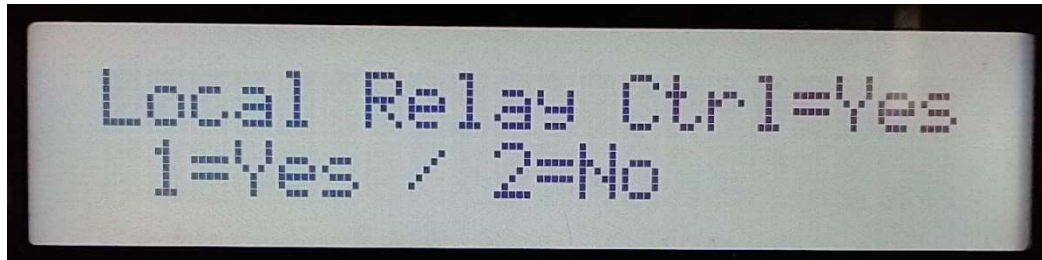
When set to "All", inputs and tamper will report to the software. "Tamper" reports only tamper activity. "Off" disables input and tamper reporting.

Reader Type



This setting lets you choose between a 26 bit standard format Prox Reader or the RCS Wi-Fi reader. Using the 'Wi-Fi' mode will allow customers to enter a code via their cell phone within 20 feet of the desired keypad. KP setting is another form of 26 bit input which disregards facility code.

Local Relay Controls



This option allows you to choose if you want the relay within the keypad to control the gate opening or if you would like to use the relay located in the SYSMAN. By choosing 'yes' the relay within the keypad unit will be used.

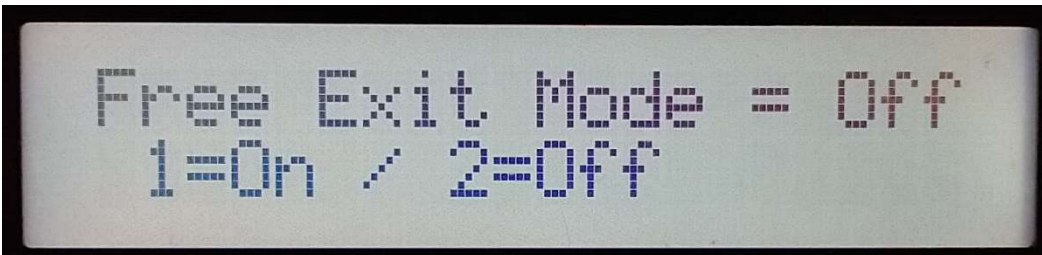
Holiday Relay



This option allows you to choose if the keypad will lock out or go into all access mode during a holiday. When set to "Open", the keypad will go into all access mode from midnight to midnight during the holiday. When set to "Lock", the keypad will override any relay timers that have been set up and lock out the keypad, except for VIP users.

Free Exit Mode

When turned on, all codes are processed as normal, however, access will still be granted to invalid codes. This is useful for granting exit to users stuck on site (free exit), while still recording their exit.



This could also be used on entry keypads during new installation or old system switchover to allow users to access the facility before their codes are in the system software.

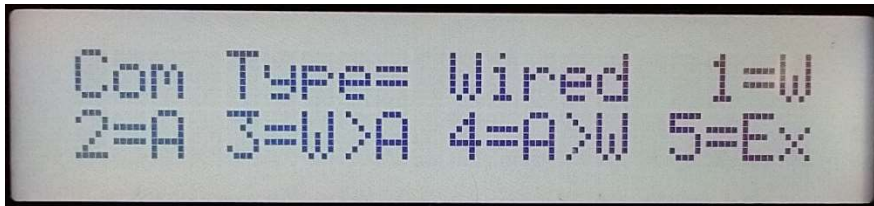
Communication Speed



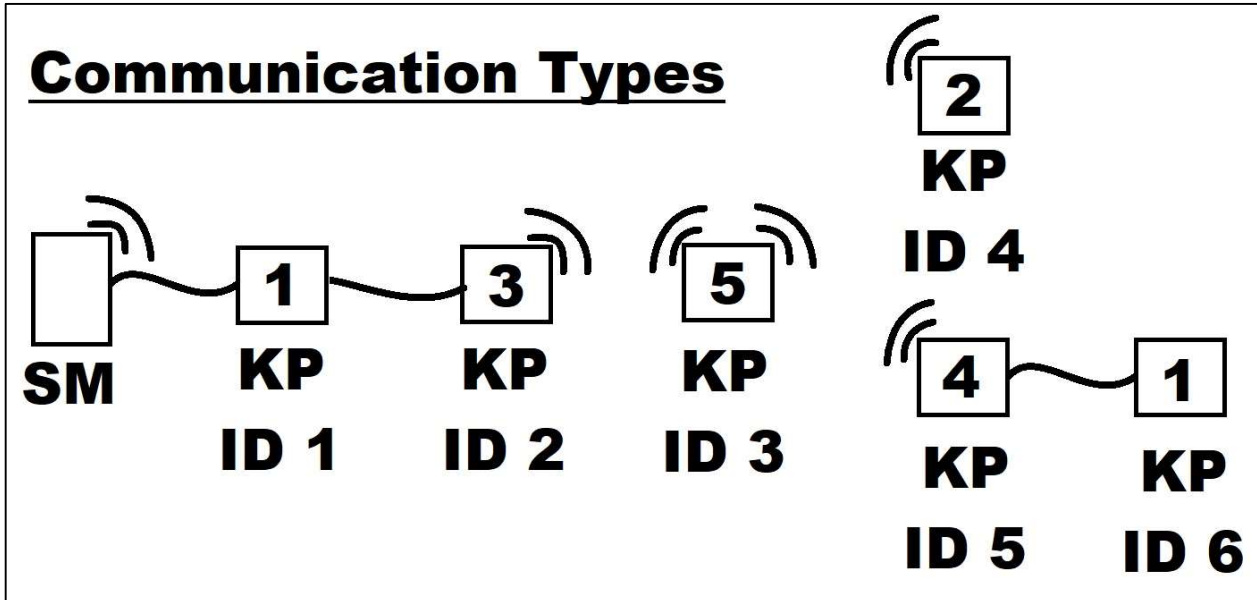
This setting is used if you want the SYSMAN and the keypad unit to communicate at a faster rate or for Air-Link systems. The normal speed is 9,600 but you can choose to increase it to 19,200 for faster keypad polling in larger systems of 16 or more keypads (be sure to make the change in the KPControl setup as well).

Communication Type

This setting is used to configure the keypad communications as wired, wireless, or repeater. For any setting other than "Wired", communication speed must be set to 19,200 for Air-Link wireless communications to work. The figure below shows the communication types in a system, the number in the keypad boxes corresponds with the setting. The settings behave as follows:

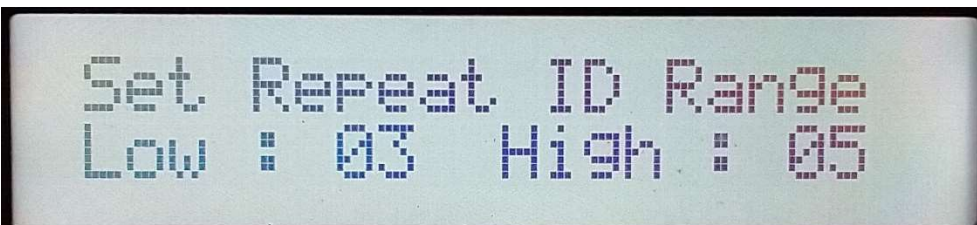


- 1 = Wired – Standard wired RS-485 coms
- 2 = Airlink – Wireless Air-Link coms
- 3 = Wire->Air – RS-485 to Air-Link wireless repeater
- 4 = Air->Wire – Air-Link wireless to RS-485 repeater
- 5 = Extend – Air-Link wireless to Air-Link wireless repeater



Repeat ID Range

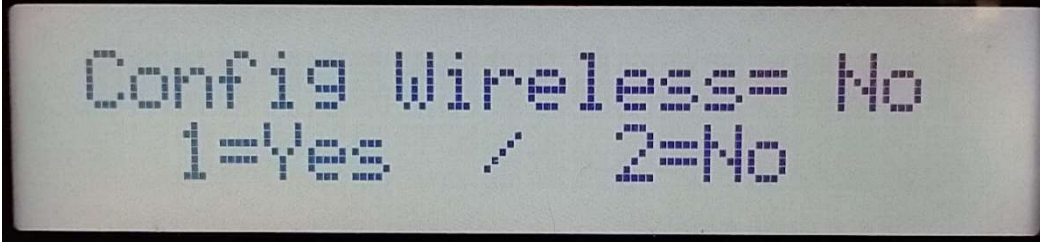
This menu only appears if the communication type is set to a repeater type (3:Wire->Air, 4:Air-Wire, 5:Extend).



When set as a repeater com type, the keypad will repeat the polls to the id range listed in this screen. In the configuration shown on the left, the keypad will repeat any communications to keypads IDs 3, 4, and 5.

Configure Wireless

If using Air-Link wireless communications, selecting “Yes” here will allow you to change the settings for the wireless speeds and channels. These settings in this section must match the settings of the wireless source or destination (System Manager or repeater keypad). System manager wireless settings are discussed above in the KP Control settings section.



If set to no, the menus will end here, and you will be brought back to the “Enter Code” screen. If set to yes, the wireless setup screens will follow.

For the following RF settings, refer to the chart below. This chart can also be found in the RF settings in KP Control.

RF Keypad Configuration

Channel: 9 [UPDATE] 0 = Default Channel
 Power: 8 [UPDATE] 9 = Max Power
 Frequency: 870MHz [UPDATE] 903MHz for USA
 Bandwidth: 250KHz [UPDATE] See Chart
 Retries: 5 [UPDATE] See Chart

*** All settings must match with keypad settings. ***

[Clear RF Config] Clears settings in the SYS-MAN. Be sure to UPDATE all of the settings you wish to change to match the keypads settings.

Must use 19200 baud with the RF Keypad system.

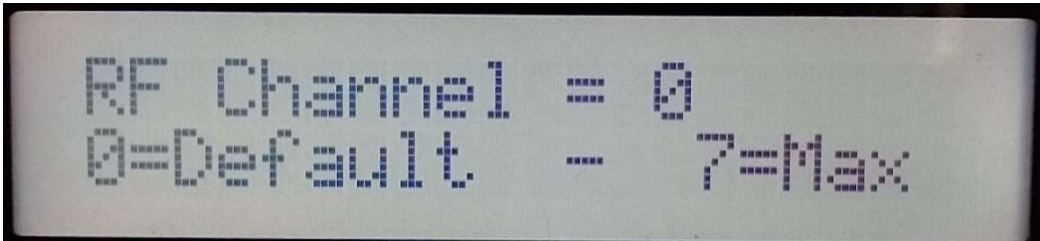
BANDWIDTH		125KHz	250KHz	500KHz
RETRIES	1	NG	NG	NG
	2	112	72	51
	3	180	110	70
	4	325	175	105
	5	580	300	160
	6	1030	530	280
	7	NG	1050	540

KP Comm Delay:
 FAST
 NORMAL
 SLOW

Lower # = Faster Communications & Shorter Range
 Higher # = Slower Communications & Longer Range

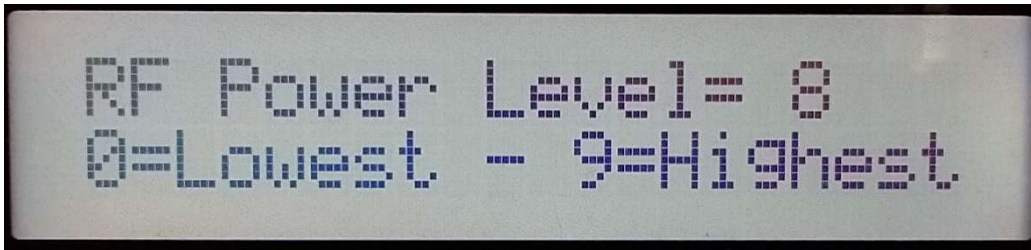
Signal Strength Test
 Keypad Address: 1 [Test] [Done]

RF Channel



RF channel must match the channel of the other end of the wireless communications. If using an “Extend” repeater, the RF Channel must be different from the extend channel. 0 is the default channel

RF Power Level



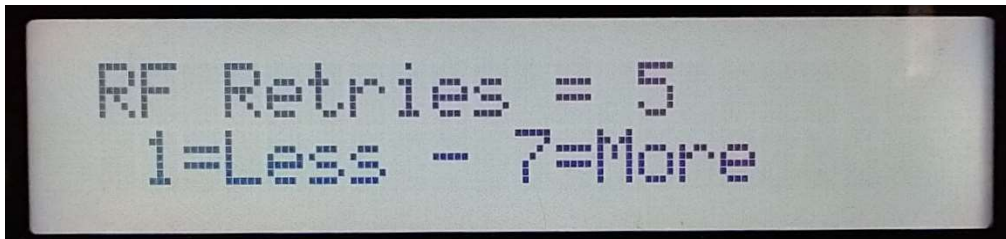
This is the transmit power of the RF communications. Select 9 to get the maximum range out of the system. This defaults to 8

RF Bandwidth



Lower values work better for longer range but communicate slower, higher communicates faster but has limited range. Must match the bandwidth of the other end of the wireless communications. 250K is the default and a good starting place.

RF Retries



Retries are used to dial in the communication speed and range similar to bandwidth. Lower numbers are faster and lower range, higher numbers are slower and longer range. Must match the retries of the other end of the wireless communications Defaults to 5.

RF Reset



Select 2 to reset primary RF settings to default. Select 1 or just hit pound to continue without resetting RF settings.

If the keypad is set up as an "Extend" type these screens will be followed by RF settings for the extend side. If not, you will be taken back to the "Enter Code" screen.

Specifications:

- Wired RS485 or Wireless Communication Network
- Max User codes/Cards: 2250
- Max code length: 10 digit
- Auto expire/activation by date (visitors)
- Max Time Zones: 99
- Optional Prox Card Reader
- Auto Relay Timers: 4 per day

- Max code check response delay: 4 sec.
- On board Real Time Clock w/DST
- Non-volatile Memory
- 15 year clock battery
- Illuminated keypad buttons
- Powder Coated aluminum box
- Input voltage: 12 to 24 VAC or VDC
- Current usage : 300 mA
- 8" wide x 8" high x 4" depth
- Optional intercom w/ high output speaker
- Optional Elevator Access Controller
- Optional Phone App for gate access
- Optional remote activity log viewing

The entire system is designed to be dependable, easy to use and is manufactured in the United States by Revenue Control Systems.

Most importantly Revenue Control Systems provides FAST and DIRECT customer support.
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