



uno

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INSTALLATION AND PROGRAMMING GUIDE



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This document outlines how to set up the **Envisalink4** for **UNO** standalone mode, as well as programming and installation.

Activating Envisalink4

Before connecting **Envisalink4** to the Panel, you must activate it on your customer's account via your **Connect2Go** Dealer Account on the **Connect2Go** portal. If you do not have a **Connect2Go** Dealer Account, go to www.connect2go.com, and click **Become A Dealer**. After setting up your Dealer Account, you will also need to set up your customer for which you are activating **Envisalink4**. For help on Dealer Account and customer sign-up, refer to the **Dealer and Customer Set Up** guide. Once you have set up your Dealer Account, as well as the customer's account, you will be able to activate the **Envisalink4** by following the steps below.

1. **Login** in to your **Connect2Go** Dealer Account.
2. Select the customer for which you are activating the device.
3. Once in the customer's account, go to the **Devices Section** and Click **Add New Device**.



4. Click on **Begin Activation**.
5. Select **Envisalink4 UNO** from the drop down list.
6. Click **Next**.
7. Enter the MAC address for the **Envisalink4**. The MAC is a 12 Digit ID number starting with 001C. It consists of HEX digits so only the numbers 0-9 and the letters A-F are valid. The MAC is found on the **Envisalink4** and also appears on the box that the **Envisalink4** came in.
8. Give the **Envisalink4** a name (e.g. House, Cottage).
9. Review the **Terms and Conditions** and check the box indicating you have read and agree to the **Terms and Conditions**.
10. Click **Next** and the following message will appear.

*Thank you. The new device has been added.
Please allow up to 10 minutes for activation to complete.*

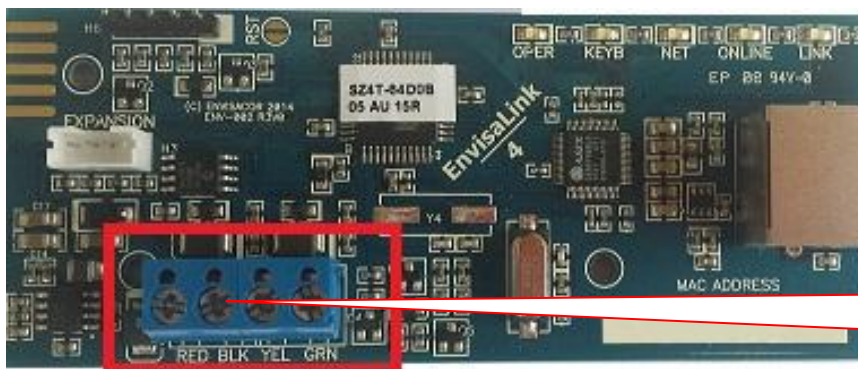
You must activate **Envisalink4** before you install it as the **Envisalink4** is shipped with DSC firmware. Once activated in UNO mode on the **Connect2Go** portal, the **Envisalink4** will download the proper firmware. This may take up to 10 minutes.

Connecting Envisalink4 in UNO Standalone Mode

Before installing the **Envisalink4**, verify that you have activated “**Envisalink 4 UNO**” on the customer’s account as to ensure that the module downloads the correct firmware.

If the system is installed at a commercial site, ensure that the outbound UDP port 4021 and the outbound TCP port 4022 are not blocked on the network.

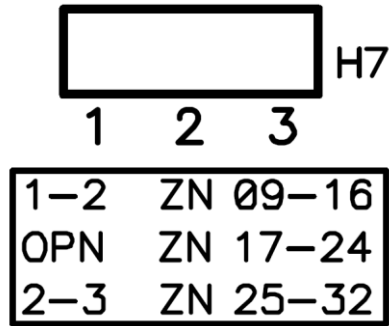
1. Select a Power Supply. In UNO mode, you must supply the **Envisalink4** with enough power to run the module, as well as any expansion modules you may install. We recommend **12Vdc** with a minimum of **500mA** output but the voltage range can anywhere from 7.5Vdc to 16Vdc. Some examples would be: **SMP3** from **Altronix**, or even a standard “wall-wart” if battery backup is not required.
2. Select your mounting arrangement. While the **Envisalink4** is designed to mount inside a **DSC** enclosure, there are other mounting arrangements that might be better suited for a simple standalone IP security system. Keep in mind that the **UNO4** and **UNO8** expansion modules have the same mounting-hole pattern as the **Envisalink4** which allows for stacking and other mounting options.
3. Connect the **Envisalink4** to your power supply with the positive wire going to the **RED** terminal, and the negative wire going to the **BLK** terminal.



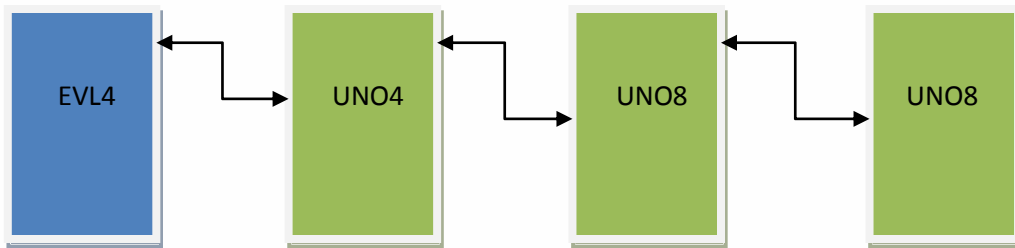
Connect the power supply leads to the terminals on the **Envisalink4**: Red and Black terminals.

4. Install Zones 1 and 2. At this time you should install the zone wiring on the **Envisalink4** itself, if used. Zone 1 is dedicated to the **YEL** terminal, and Zone 2 is dedicated to the **GRN** terminal. These two zones are configured for **normally-closed contacts only**. If you have any normally open zones you must use one of the zone expansion modules like the **UNO4** or the **UNO8**.
5. Install zones on expansion modules (if applicable). Because the **UNO4** and the **UNO8** are designed to stack on top of one another, you may not be able to access the screw terminals once the boards are stacked. For that reason we recommend you complete your zone wiring before stacking. If you are using more than one **UNO8** don't forget to properly address the modes so that the zones do not overlap with each other. Each **UNO8** has to have its own address on the expansion bus.
6. Address your **UNO8** modules (if applicable). You can have up to three (3) **UNO8** modules on one system. Each one needs to be addressed uniquely to cover zones 9-16, 17-24, and 25-32. Use the supplied plastic

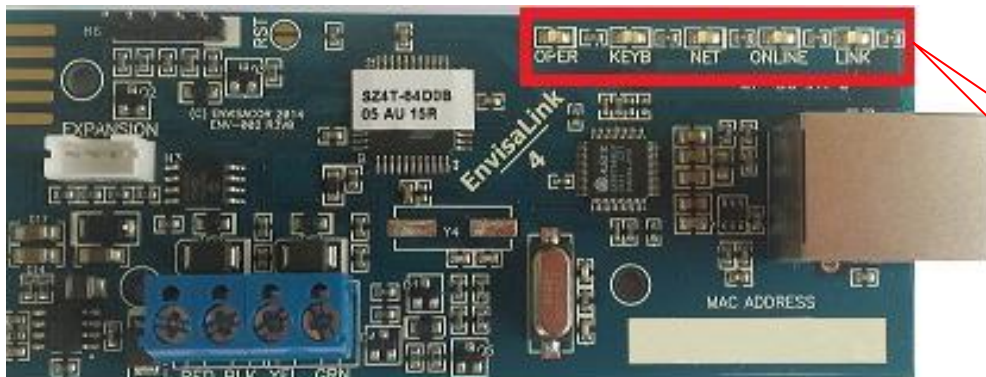
shunt to jumper the appropriate pins on H7 as per the table below.



7. Install expansion modules, (if applicable). Using the included board-to-board standoffs, and the 4-wire expansion cable, connect each module to the **Envisalink4** in a *daisy-chain* fashion. The order of modules in the chain does not matter. The diagram below shows one **UNO4**, and 2 **UNO8**, forming a 22 zone, 6 programmable-output **UNO** system.



8. Using an 8-Conductor Ethernet Cable (not supplied) with an RJ-45 connector, connect the **Envisalink4** to an available router, hub or switch port on a network with a DHCP Server (usually within a router). Power-up your **Envisalink4**.
9. There are a number of LED lights located on the **Envisalink4**. If installation and activation of the module was done correctly, you will see five solid green LEDs with the LINK LED being flashing occasionally to indicate network traffic. The KEYB LED may be off during the first 10 minutes after installation while the module downloads UNO firmware. Wait 10 minutes before troubleshooting.



The **Envisalink4** has 5 LEDs. See table below for LED Descriptions.

LED Name	Description
OPER	SOLID GREEN - Power and functioning. OFF – Not functioning and not powered properly.
KEYB	TWO QUICK FLASHES - Running in UNO mode. SOLID GREEN – Panel Connected (DSC or Honeywell firmware installed) FLASHING - Panel not connected (DSC firmware installed). OFF – Panel not connected (Honeywell firmware installed).
NET	SOLID GREEN – IP obtained through DHCP server (router). FLASHING – Module programmed to static IP. OFF – Module cannot obtain IP form DHCP server (router).
ONLINE	SOLID GREEN –Module is communicating with servers and account is properly set up. FLASHING – Module is communicating with servers but no account exists. OFF – Module is not communicating with servers.
LINK	SOLID GREEN – Ethernet link established. Will flick with RX/TX. OFF - No Ethernet link.

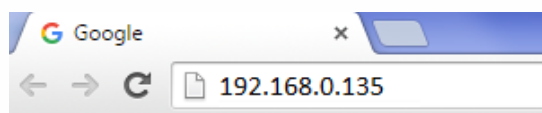
10. After ten minutes the “KEYB” LED should also be solid. If the LED is flashing, you still have the default DSC firmware installed which indicates there is a network problem. If the LED is off, you somehow activated the module in Honeywell mode.

DO NOT LEAVE the installation until you have five green LEDs lit.

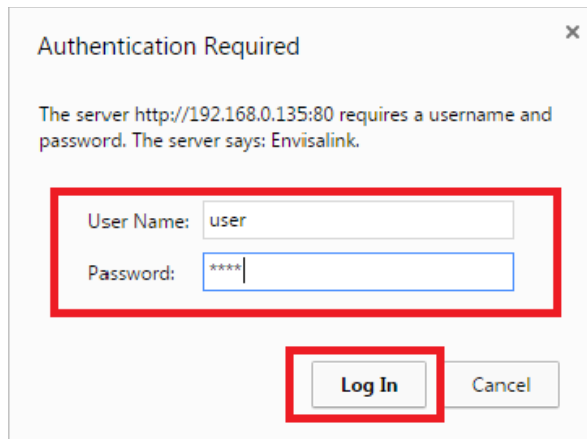
Accessing Envisalink4 Locally

Now that the **Envisalink4** is installed and functioning, you may have to access the **Envisalink4** locally in order to perform troubleshooting. For more information on accessing **Envisalink4** locally, please refer to the *Accessing Envisalink4 for Status, Programming and Troubleshooting Application Note*.

- To access the **Envisalink4** web interface, type the **Envisalink4** IP address into any browser on the same internal network as the module (i.e. your customer’s network). For help on obtaining the **Envisalink4**’s IP address please refer to the *Accessing Envisalink4 for Status, Programming and Troubleshooting Application Note*.



- Once entered, the following login pop-up should appear. Enter user in both the User Name and Password fields and click **Log In**.



Once you have logged into the web interface, the local **Envisalink4** homepage will appear as seen below. This page allows you to have some rudimentary control over the system as well as showing status. Under **expansion modules**, you will see which expansion modules, if any, have been installed.

EnvisALERTS 

Envisalink 4

2016-08-02 19:38 - System Time

Home | Network

Security Subsystem - UNO Standalone

Zone Status

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

System Status

System Ready

HVAC Subsystem - If Equipped

Expansion Modules

UNO4

Refresh Page

Envisalink UNO Programming Options

Programming is required for the **Envisalink4** to function properly; Zones have to be defined, user codes added etc. Once your **Envisalink4** is online and has the proper **UNO** mode firmware, you will see an option for programming in your dealer portal. An example is shown below.

Account Options Show (+)

Individual Portal Settings Show (+)

Devices Add New Device

ID/MAC: 001C2A [redacted] Type: UNO

Name: Bench UNO

Status: Last Update: August 4, 2016, 11:28 am - Normal Operation

Firmware Version: 95

Monitoring Status (?): Not Monitored - Enable(1 Credit)

Connect2Go Plus Status (?): Not Enabled - Enable(1 Credit)

Programming: Update Programming

Delete

N.B. Your module must be online for programming to be available.

Click on “Update Programming” to start a programming session. If you are familiar with “downloading” on other on panel types, you will find this interface similar. As soon as you enter programming your **Envisalink4** will upload to the server all of its programming information. The date and time of the upload is shown at the top of the programming page as well as the MAC address of the module to which the data is from.

Device Programming

Device Settings

MAC: 001C2A0108FB

Data Upload Time: 2016-08-04 12:42:35

The time shown is the local time of the **Envisalink**, which is not necessarily your local time.

Zone Definitions

Zone	Definition
1	Entry/Exit Zone

IMPORTANT: Make sure the Data Upload Time is within the last few minutes when starting a session. Data is cached on the server and may be old. Such a scenario would only happen if there were network problems.

Programming Options

The programming options are divided into four groups:

- Zone Definitions

- User Codes
- Programmable Output Definitions
- System Options

Zone Definitions

Each of the available zones must have a definition to be active on the **UNO** system. There are up to 30 zones available in a fully expanded system: **Envisalink4**, one **UNO4**, and three **UNO8**. Zones 7 and 8 are never available. The physical locations of the zones for **UNO** are explained in the table below.

Zone Number	Host Device	Zone Capabilities
1-2	Envisalink 4	Normally Closed Only
3-6	UNO4	Normally Closed, EOL resistors, and Double EOL resistors
9-16	UNO8 (Slot 1)	Normally Closed, EOL resistors, and Double EOL resistors
17-24	UNO8 (Slot 2)	Normally Closed, EOL resistors, and Double EOL resistors
25-32	UNO8 (Slot 3)	Normally Closed, EOL resistors, and Double EOL resistors

Each used zone requires programming of the zone function and how **UNO** will respond to state changes. This is the same as any other security system. Zone definition programming is done through the **device programming** page, with a drop-down box for each type of supported zone definition. Below is a table explaining each zone definition type.

Zone Definition	Description
Null (Not Used)	Not Used –Default
Entry/Exit Zone	This perimeter zone type is used for normal entry doors and uses the programming entry or exit delay upon disarming or arming. These zones also work with the door chime feature.
Interior Zone (Stay)	This interior zone will be automatically bypassed when the user arms the partition in arm-stay mode.
Instant Zone	This perimeter zone has no entry or exit delay. An example would be a perimeter window. This zone does not use the door chime feature.
24 Hour Zone	The zone will generate an audible alarm on the partition regardless of the state of the partition. Examples would be fire zones, flooding detectors, or freeze detectors.

Keyswitch (Maintained)	This zone type will arm or disarm a partition by its physical state. An example would be a toggle switch or key-lock. Closing this zone without the partition ready will not arm the system. It will automatically arm when the partition becomes ready .
Keyswitch (Momentary)	This zone type will toggle the state of partition, armed or disarmed , when it transitions from open-to-close-to-open. An example would be a momentary push-button switch.

IMPORTANT: Only 1 **Maintained Keyswitch** zone may be programmed on a system. Programming more than one zone as a **Maintained Keyswitch** zone will cause unpredictable behaviour.

User Codes

The **Envisalink UNO** platform allows for 32 unique user codes to control arming and disarming of the system/partition. A user code is 4 digits long and must contain only numbers. Programming of user code is done from the **device programming** page. A code of all zeros, **0000**, is invalid and indicates that the user code entry is not used.



Programmable Outputs

The **Envisalink UNO** platform allows for up to 8 user programmable outputs (PGMs). These physically reside on the **UNO4** and **UNO8** expansion boards and provide **negative-trigger** (open collector) outputs capable of handling up to **3A** at **16Vdc**. This high power rating means that a secondary relay is not needed for most applications, i.e. 50W external siren. **NOTE:** The **Envisalink4** does not have an auxiliary power output so the power for the device on the programmable output must come for the external power supply.

In addition to high power, the first programmable output on each expansion module is capable of analog output. This allows the user to control the current through the programmable output from 0% to 100%. This could be used to dim a light, or IR illuminator, or even a DC motor. **NOTE:** Analog output is only available to a programmable output defined as **normal** in the definitions.

PGM Number	Host Platform	Capability
1	UNO4	Full Analog, Digital (ON/OFF)
2		Digital (ON/OFF)
3	UNO8 (Slot 1)	Full Analog, Digital (ON/OFF)
4		Digital (ON/OFF)
5	UNO8 (Slot 2)	Full Analog, Digital (ON/OFF)
6		Digital (ON/OFF)
7	UNO8 (Slot 3)	Full Analog, Digital (ON/OFF)
8		Digital (ON/OFF)

Table 1: Programmable Output Locations

Below is a list of programmable output functions and their meaning

Programmable Output	Description
Null (Not Used)	Not Used –Default
Bell Follower	When set to this function, the PGM will be active (ON) whenever the system siren would be active. This would only be when the partition is in alarm.
Normal (0% - 100%)	This mode is for user-controllable devices. The customer can select whether this PGM is ON, OFF, or some percentage in-between from their Connect2Go Portal .
Pulse (2 Seconds)	This mode is typically to control a garage door opening by simulating a button push. Any action on this PGM from the Connect2Go Portal will cause the PGM to be active for 2 seconds, and then become in-active.
Ready-to-Arm Follower	A PGM set to this type will be active whenever the partition is ready , inactive otherwise.
Status Follower (Armed/Disarmed)	A PGM set to this type will be active whenever the partition is armed , inactive otherwise.
Buzzer Follower	A PGM set to this type follows the on-board buzzer (UNO4 and UNO8). This allows for a remote sounder to follow audible notifications similar to a traditional security keypad.

System Options

The final programming area pertains to system wide options. These are added and changed regularly so what is shown below may be different from what you see in your **device programming** page. The options are self-explanatory and should be familiar to any security professional.

System Options

User	Code
Bell Time Out (minutes)	10
Exit Delay (seconds)	30
Entry Delay(seconds)	30
ON - Normally Closed Contacts / OFF - EOL Resistors	<input type="checkbox"/>
ON - Using Double EOLs / OFF - Single EOLs	<input type="checkbox"/>
ON - Audible Door Chime / OFF - Disabled	<input checked="" type="checkbox"/>
ON - Audible Trouble / OFF - Disabled	<input checked="" type="checkbox"/>

Don't forget to click here to save your programming!

Submit

Saving and Downloading

Once you have made any changes to any of the programming options, you must select **SUBMIT** in order for the changes to be saved to the **Connect2Go** servers and subsequently downloaded by the **Envisalink4**. **NOTE:** It is highly recommended that you reboot the **Envisalink4** after you make any changes to zone definitions or change a zone requirement like double end-of-line resistors. Such changes may leave the system in an unknown state.

Troubleshooting Tips

Zones/Programmable Outputs Not Working

1. Check to make sure the expansion module appears on the local page
2. The status LED on the expansion module show flash slowly if it is online with the **Envisalink4**. If not, check the expansion cable.

Module is Offline with Servers

For Network Troubleshooting, refer to the *[Accessing Envisalink4 for Status, Programming and Troubleshooting Application Note](#)*.

Dealer Support Contact Information:

If you have any questions or concerns, or have trouble activating your account and setting up customers, please email our Help Desk at support@connect2go.com or call 647-503-3406. Note that phone support is only available, Monday-Friday 9am-4pm EST.