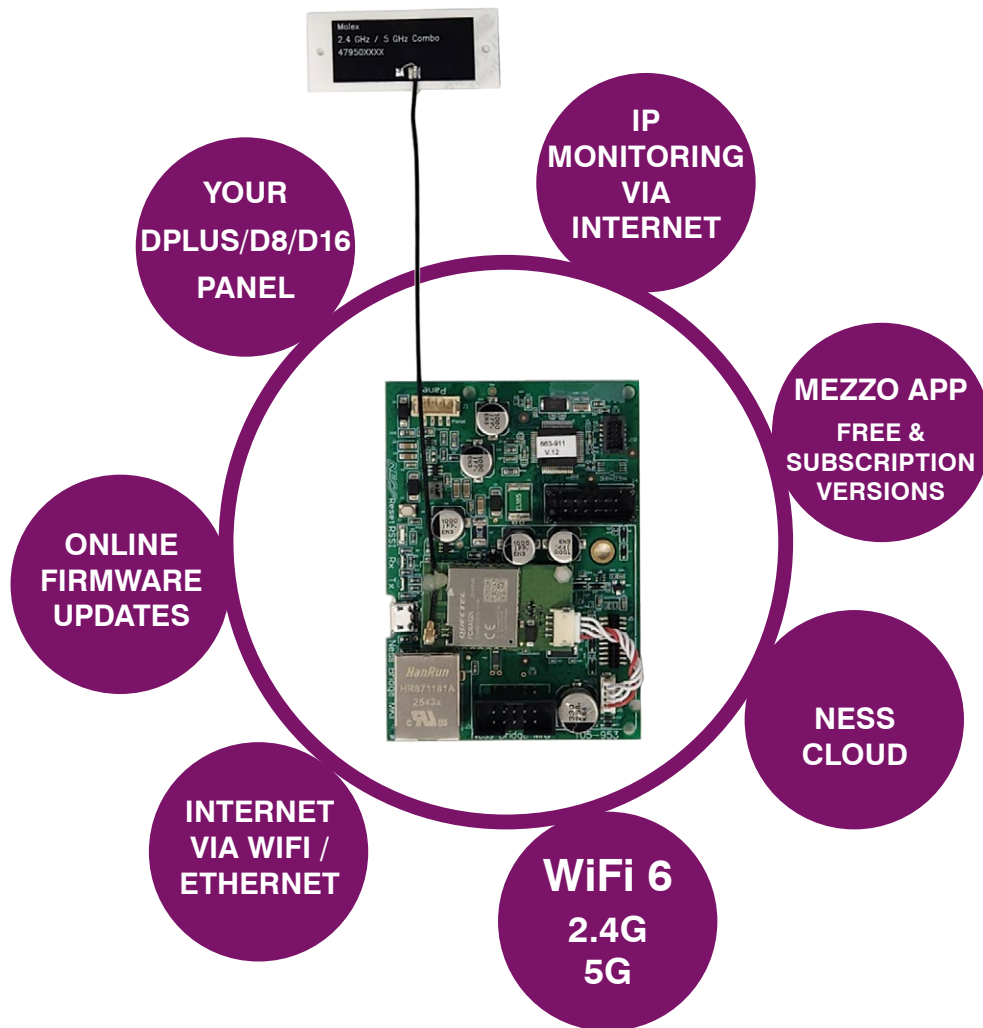




– BRIDGE PLUS GEN2

Internet Interface



NESS-BRIDGE PLUS
INTERNET INTERFACE MODULE GEN2
NESS MEZZO APP

Installation & Operation Manual

Rev 1.0



CORPORATION

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NESS-BRIDGE PLUS INTERNET INTERFACE MANUAL

Document Part No: 890-519

Rev 1 Sep 2026

Applies to 106-018 Ness-Bridge Plus Ethernet Interface Gen2

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QUICK START

HANDY STEPS TO GETTING UP AND RUNNING

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1. Install Ness-Bridge	6, 7
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3. Choose your network connection method - Ethernet or WiFi	8
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INTRODUCTION

Ness-Bridge Plus is an easy to install internet interface providing internet connectivity and IP Monitoring for Ness DPlus/D8/D16 control panels.

Ness-Bridge Plus in combination with the **Ness Mezzo** app provides powerful remote operation features for your Ness control panels.

Ness Bridge Plus Features

- Ethernet & WiFi 6 (2.4GHz/5GHz) connectivity (Automatic Ethernet priority)
- Supports IP Monitoring over Ethernet and WiFi
- Supports industry standard ArmorIP and CSV IP monitoring protocols
- Automatic (configurable) firmware updates Over The Air (OTA)

Mezzo App Features

- Arm and Disarm¹
- Home Mode operation²
- Operate panel outputs² *
- Receive Push Notifications for Arm/Disarm and alarm events²
- View zones and panel status²
- Free and subscription app versions available

¹ Available in Mezzo App free version.

² All features available in the subscription version.

* Outputs require optional 106-013 Relay Board/s. Other conditions apply, refer to page 27.

MEZZO APP OFFER

INTRODUCTORY OFFER

Enjoy full access to all Mezzo subscription features FREE for 3 months from the date of activation.

After the 3-month introductory period, you can subscribe at a low ongoing rate to continue enjoying the full range of features.

Alternatively, you can continue to use the free app version at no cost, with access to basic Mezzo functionality.

HARDWARE OVERVIEW



WiFi Antenna
(Do not cut or extend, must be vertically aligned for best performance.)

106-018
Ness-Bridge Gen2 module

4-Pin header connects via the 4 wire loom to the DPlus/D8/D16 serial port

Reset (RST) Button

RSSI LED

RX LED

TX LED

USB Port (Factory use only)

RJ45 Ethernet port



COMPATIBILITY

Ness-Bridge is compatible with:

Ness Control panels

DPlus

D8XD / D16XD (Rev6 and later)

D8XCEL 4G / D16XCEL 4G

Mobile Devices

Android: 7.1 or later

iPhone: iOS 15.0 or later

INCLUSIONS

1x 106-018 Ness-Bridge Plus module

1x 450-357 WiFi antenna with micro-coaxial RF connector & self-adhesive head*

1x 450-233 4-wire loom

2x Red slider mounting rails

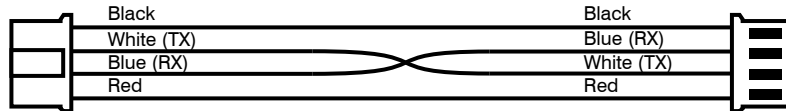
* The WiFi antenna is also available to purchase separately should a replacement be required due to damage during installation.

SERIAL CONNECTION

Connection to
current version panels
with 4-pin serial port

Ness-Bridge connection to DPlus, D8x/D16x V8.x and D8/D16 XCEL
Use the 4 wire loom supplied with Ness-bridge module.

**106-018 Ness-Bridge
Ethernet Interface**
4pin Serial Header



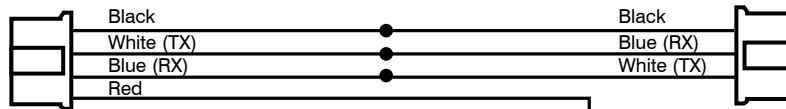
Control Panel
4-pin Serial Header

Connection to
previous model panels
with 3-pin serial port

**Ness-Bridge connection to older D8/D16 V6.x/V7.x
3-pin Serial Port**

Use the 4 wire loom supplied with Ness-bridge and join to a 450-185 serial lead 3pin (cut off and discard the DB9 plug).

**106-018 Ness-Bridge
Ethernet Interface**
4pin Serial Header



**D8X/D16x
V6.x/V7.x**
3-pin header

Note.

Before cutting the original wire loom.

The two ends of the wire loom are not the same.

The Ness-Bridge end is wired as above - note the positions of Blue and White with respect to Black and Red.

TX/RX connection is cross-over.

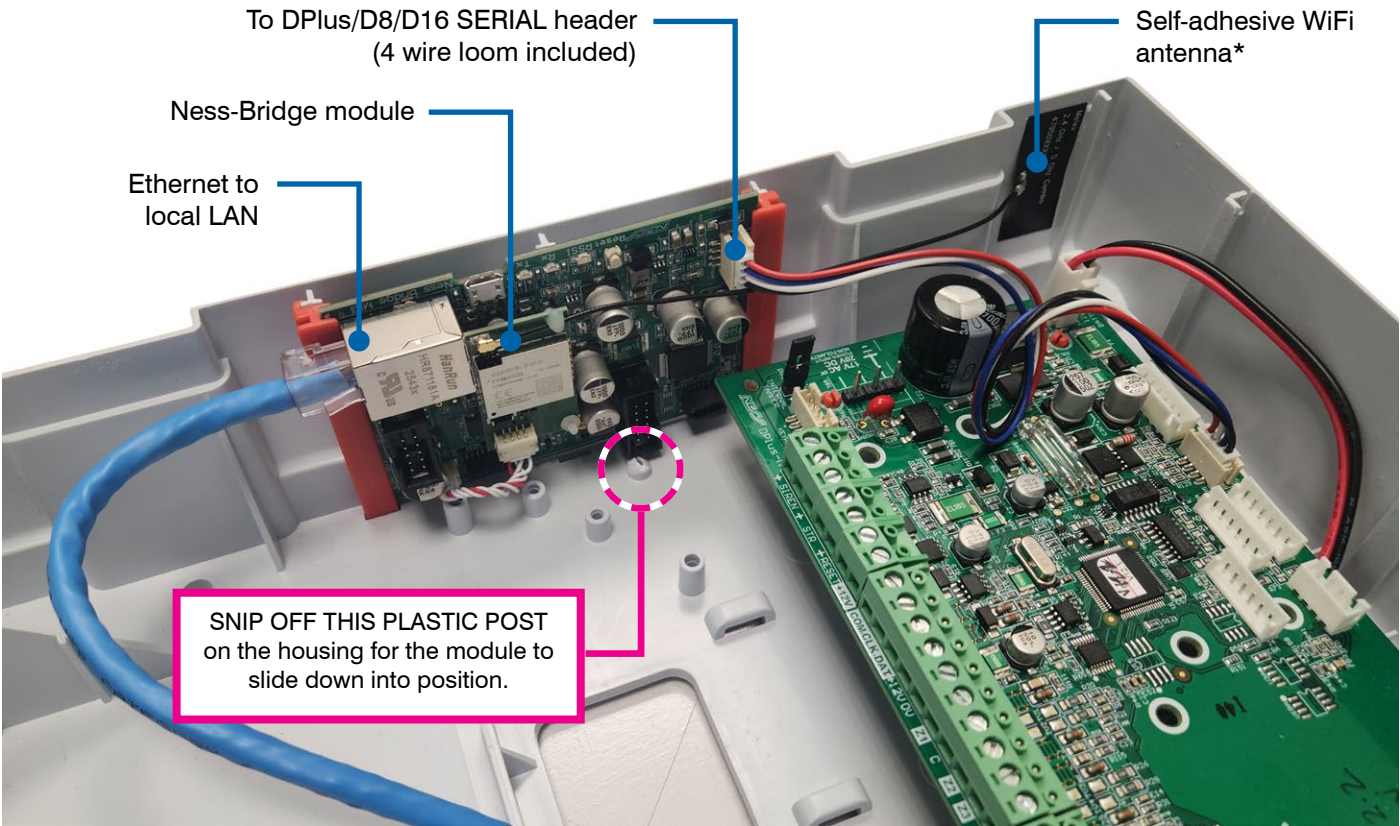


**D8/D16
+12V**

**HARDWARE
SETUP**

Install the Ness-Bridge module in your panel housing using the red slider rails provided and connect the 4-wire loom to the DPlus/D8/D16 SERIAL port.

The WiFi antenna has a self-adhesive pad that should be affixed to the plastic housing as shown. Position the antenna straight and vertical for optimal WiFi performance.



* If Ness-Bridge Gen2 is installed inside a metal housing, an optional external antenna may be fitted outside the enclosure to maintain or improve WiFi signal strength.

Optional extra, 451-016 Ness Bridge G2 External WiFi Antenna.

**PANEL
PROGRAMMING**

ESSENTIAL STEP

In the DPlus/D8/D16 panel, enable serial port options at P199E. Installer Programming mode.

P199E, turn on options 1E-7E

KPX+	P199E select options 1E to 7E
NAVIGATOR	P199E > select options 1 to 7

HARDWARE RESET

To default ALL SETTINGS

To default all Ness-Bridge hardware and user settings and reboot the Ness-Bridge module press and hold the RST button for 30 seconds.

The green LED will flash continuously during the 30 second process. Release the RST button when both TX & RX red LEDs turn on.

To default WiFi settings

To default the Ness-Bridge WiFi settings to factory settings, press RST button twice, (long press, 2 seconds each press).

TX RED LED will confirm the action.

TX RED LED will flash continuously during boot-up followed by a single flash from RSSI LED when completed (approx 3 minutes).

FIRMWARE UPDATE

From time to time there may be firmware updates in which case you will be reminded to apply the update.

In Mezzo app go to Menu>About>Firmware Update Mode

NETWORK CONNECTION METHOD

Before you set up Mezzo app it's best to decide at this stage whether your network connection will be via ethernet or WiFi.

If by WiFi, don't connect an ethernet cable.

If by Ethernet, you will need to setup your home WiFi network in Mezzo app (enter network name, password etc) and choose to use WiFi for backup.

If by Ethernet and WiFi backup is required, you will need to setup your home WiFi network in Mezzo app (enter network name, password etc).

If ethernet is interrupted the device switches to WiFi backup.

Note, WiFi will take a few minutes to recover.

LEDS OPERATION

Operation	LED		MEANING
BOOT UP SEQUENCE	GREEN (RSSI), continues flashing during the boot-up sequence		
	Step 1	BLUE, ON for 3sec	Ethernet is ready
	Step 2	Two BLUE LEDs flash the firmware version	Example: BLUE LED(A) 1 flash followed by BLUE LED(B) 9 flashes = v19
	Step 3	GREEN LEDs flash chasing pattern	WiFi module boot-up
	Step 4	GREEN (TX & RX) ON together (Approx 30-60sec from power-up)	WiFi module is ready
	Step 5	Boot-up completed (Approx 1min after power-up)	
RUN MODE	GREEN (RSSI) slow flash		Heartbeat, normal run mode
	GREEN (TX & RX) flash during comms		Data transfer between Ness-Bridge and the control panel
ERRORS	RED LED flashes continuously		Errors are present - Brief press the RST button to read error codes
	Error Codes	00	NO_ERROR
		01	WIFI_STATION_CONNECT_ERROR
		03	WIFI_COMMS_ERROR
		04	WIFI_DATA_EXIT_ERROR
		09	WIFI_AP_MODE_ENABLE_ERROR
		10	ARMORIP_CONNECT_ERROR
		11	CLOUD_CONNECT_ERROR
		21	USB fault
		23	EEPROM_FAULT
		25	SESSION_KEY_ETHERNET_FAULT
		26	ARMORIP_RESPONSE_ERROR
		27	SERIAL_NUMBER_ERROR
		28	DATA_SESSION_ERROR
		30	SYSTEM_INTERNAL_ERROR
		31	WIFI_SOCKET_OPEN_CLOSE_ERROR
		33	EEPROM_CRC1_ERROR
		34	EEPROM_CRC2_ERROR
		35	EEPROM_CRC3_ERROR
		36	EEPROM_CRC4_ERROR
		41	WIFI_SETUP_MDNS_ERROR, WIFI_SERVER_SOCKET_OPEN_ERROR
		43	DX_COMMS_ERROR

CHECK YOUR CONTROL PANEL SETTINGS

The serial port must be enabled in your DPlus/D8/D16 control panel.

P199E, turn on options 1E-7E (See page 7) Panel Programming

BEFORE YOU START

- The smart-phone used to set up the Ness-Bridge will become the master administrator account and uses the control panel's Master Code (P201E) to operate the panel.

It is strongly recommended that setup is performed using the smart-phone of the primary user of the system (usually the owner of the premises).

- The primary user's **smart-phone must be on the same network as the Ness-Bridge during initial setup.** Once the Ness-Bridge has been successfully added and activated you'll be able to connect from any network.

ADDITIONAL USERS

When additional users activate their Cloud account/s on their own smart-phones, they will appear in the administrator's app in the menu **USERS > REQUESTS**.

The administrator adds the new user as a **FAMILY** or **GUEST** user.

FAMILY users can arm and disarm. **GUEST** users can only view events.

MEZZO APP SUBSCRIPTION

INTRODUCTORY OFFER

Enjoy full access to all Mezzo subscription features **FREE** for 3 months from the date of activation.

After the 3-month introductory period, you can subscribe at a low ongoing rate to continue enjoying the full range of features.

Alternatively, you can continue to use the free app version at no cost, with access to basic Mezzo functionality.

APP SETUP

- 1 Get MEZZO app from Google Play store or Apple App Store



ANDROID



iOS

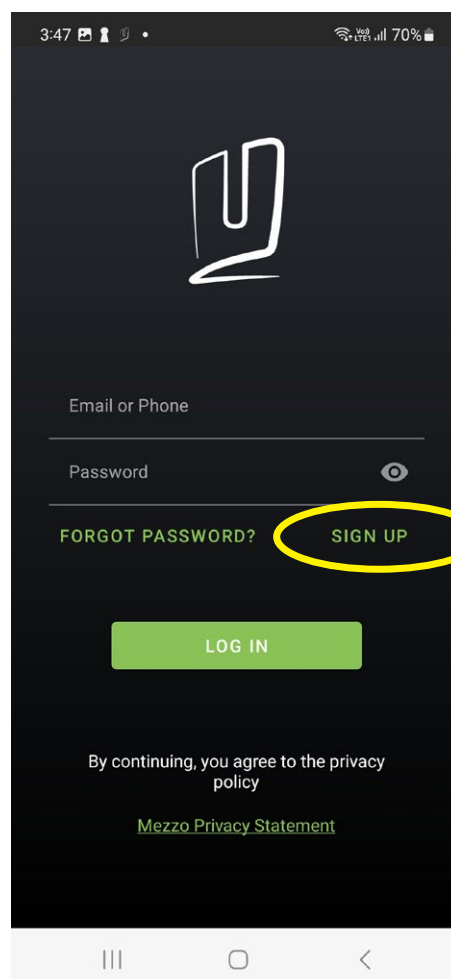
- 2 Install Mezzo app

- 3 If you have a **Ness Cloud** account, enter your Email and Password to login.

To create a new account tap SIGN UP



Ness Cloud is the online service providing login facilities for your Mezzo app and allows Mezzo app to connect to the Ness-Bridge module. Access to Ness Cloud is free for basic operation of your devices via Ness-Bridge.



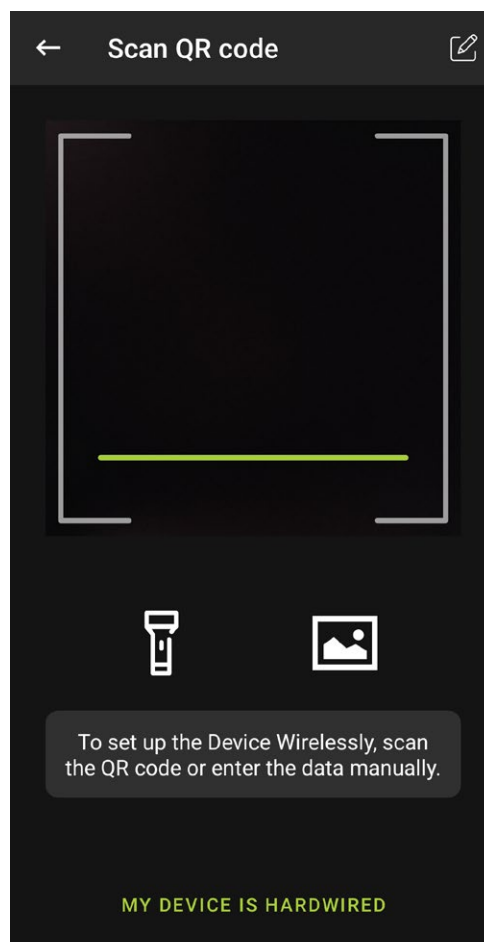
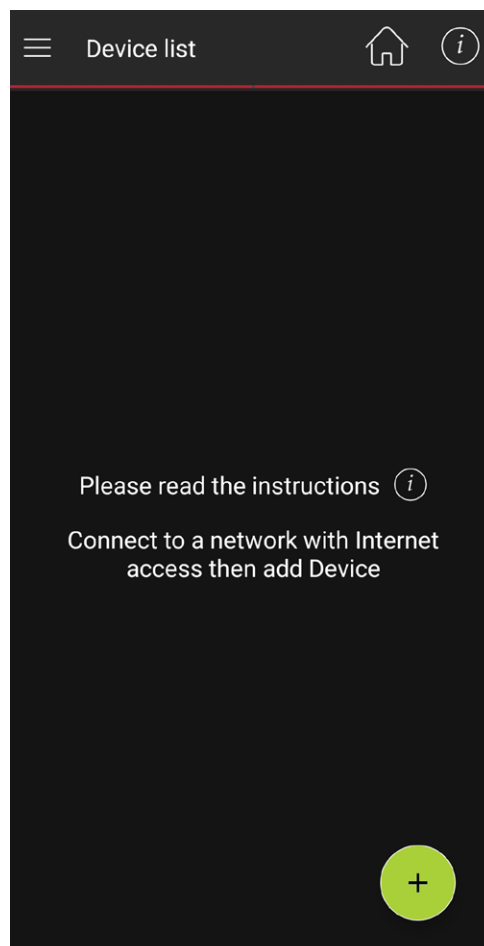
APP SETUP

- 4 Tap the Menu icon  and choose Device List

- 5 Tap  to add your Ness-Bridge device

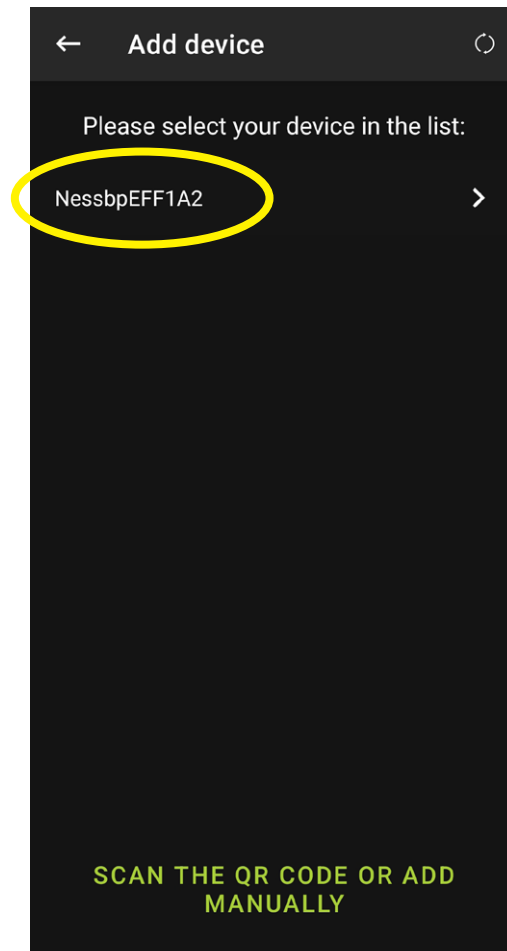
- 6 To setup the Ness-Bridge via WiFi, Scan the QR code on the rear of your Ness-Bridge device.

Or to setup via an ethernet connection, tap My Device Is Hardwired.

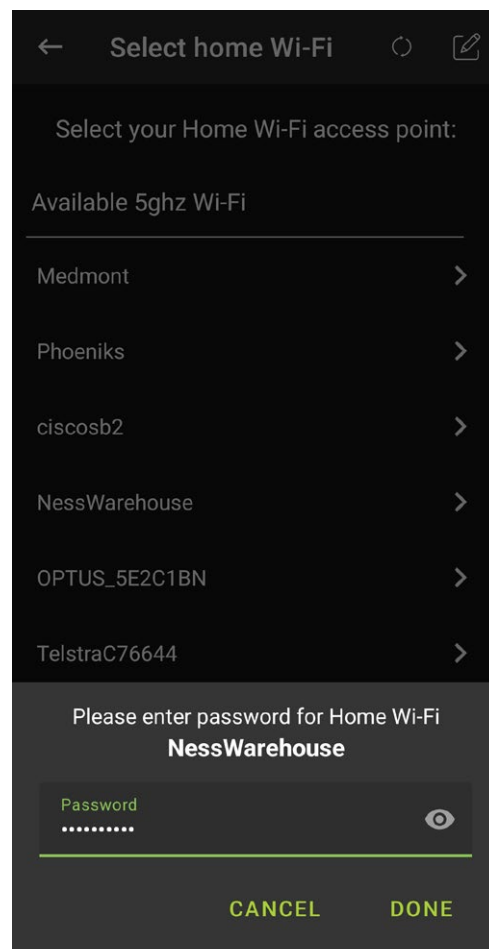


APP SETUP

- 7 Once the Ness-Bridge device is found, tap the device name to select.

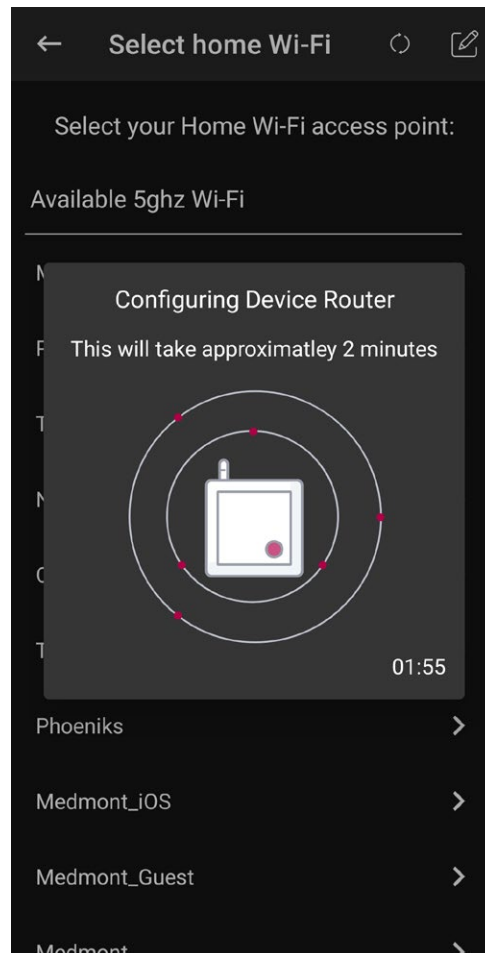


- 7a Select your home WiFi network and enter the WiFi password.

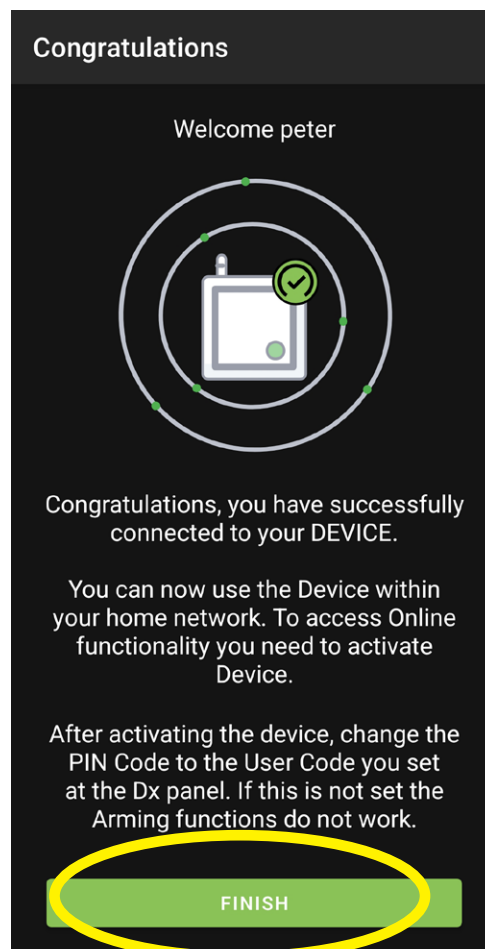


APP SETUP

- 8 Please wait while the device router is configured.



- 9 The device has been successfully added. Tap FINISH.

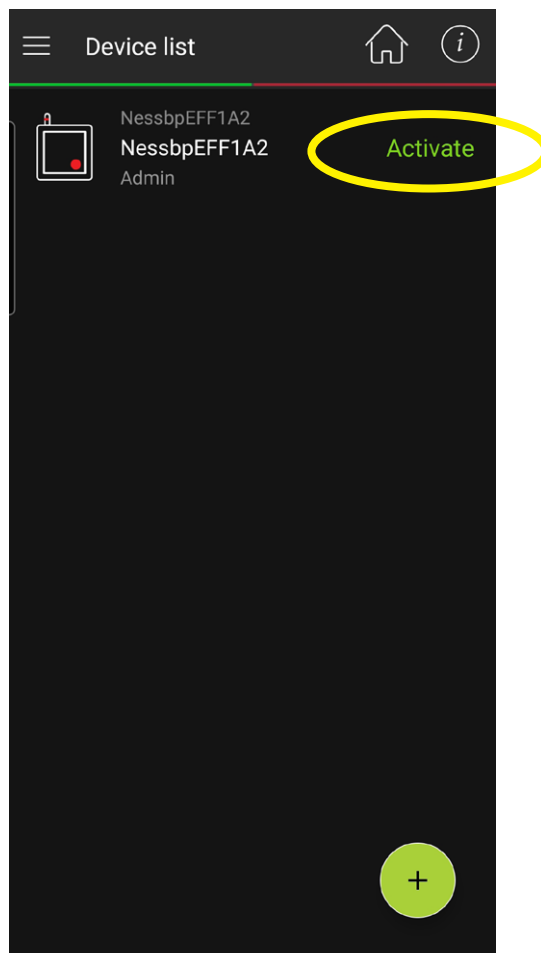


APP SETUP

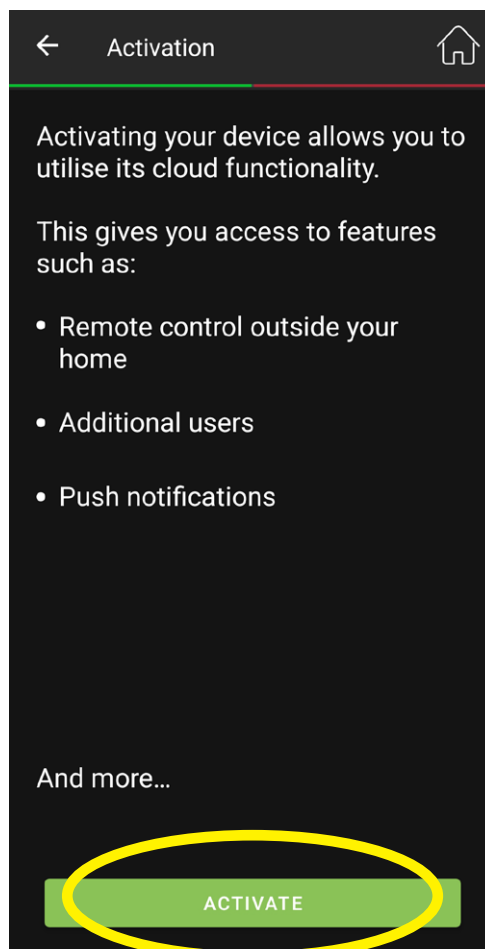
- 10 Tap **ACTIVATE** to activate the device in the Ness Cloud.



NOTE: Activation steps and instructions may change once in-app subscription services become available.

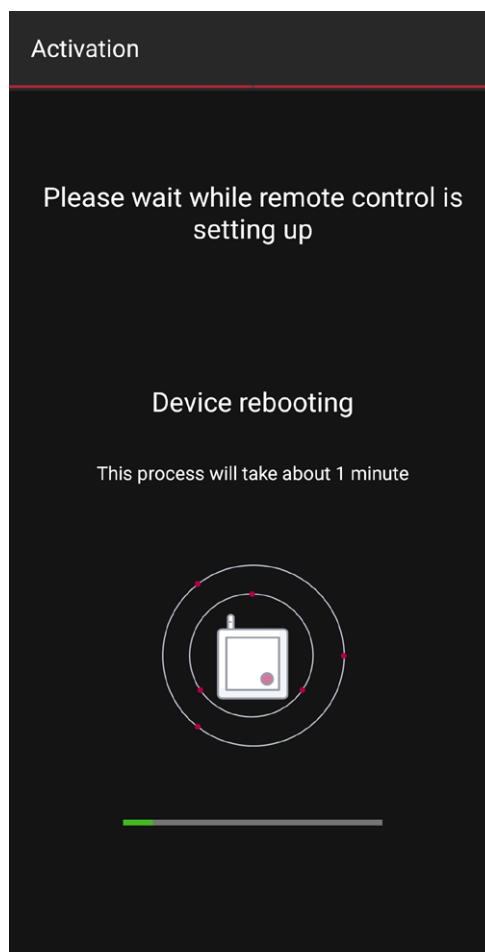


- 11 Tap **ACTIVATE** again.

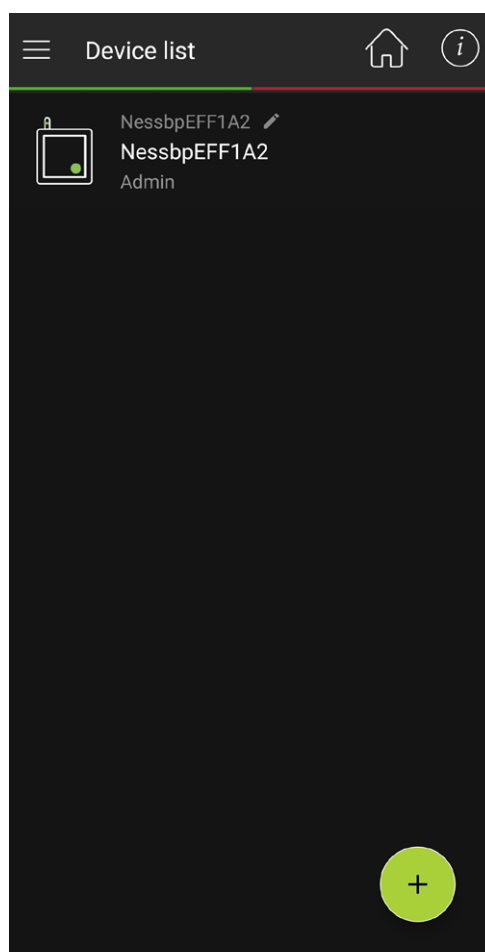


APP SETUP

- 12 Please wait while remote control is setting up.



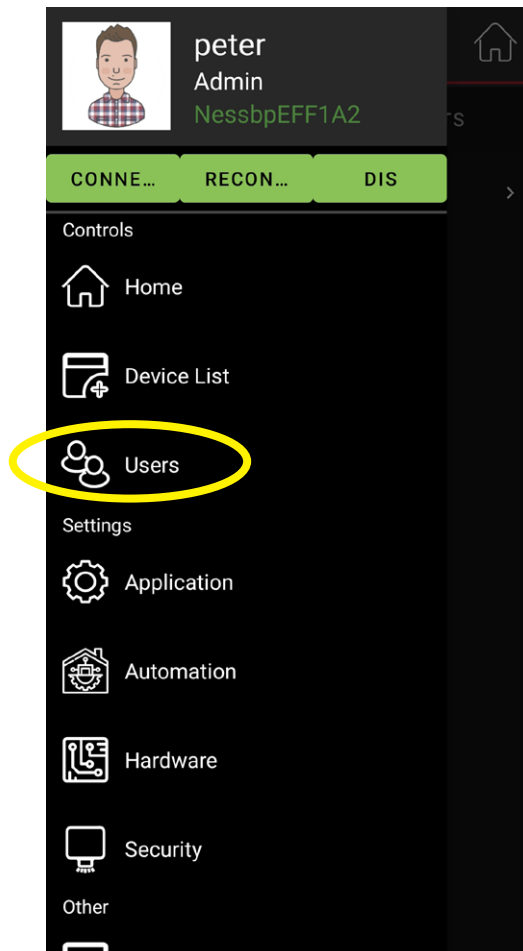
- 13 The device has been successfully added.



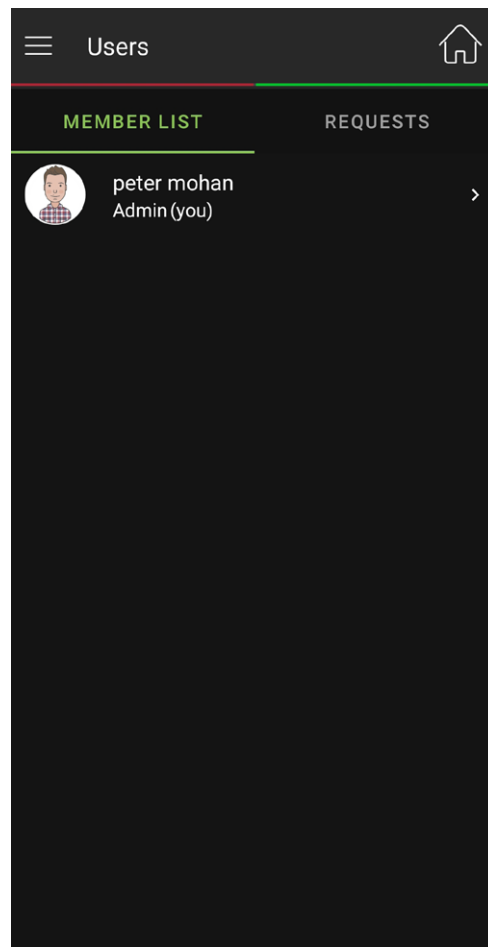
APP SETUP

Setup your PIN to match your user code in your DPlus/D8/D16 control panel.

- 14 Tap the Menu icon  and choose Users.



- 15 Tap your user account



APP SETUP

- 16 On your profile page, tap **CHANGE PIN CODE**

- 17 Enter a PIN to match your DPlus/D8/D16 user Code.



IMPORTANT

Each unique Mezzo app user must also have their own user code in the DPlus/D8/D16 control panel.

Example mapping of user codes:

MEZZO APP PIN	CONTROL PANEL USER CODE
1234	1234
5678	5678
2468	2468
... and so on	...

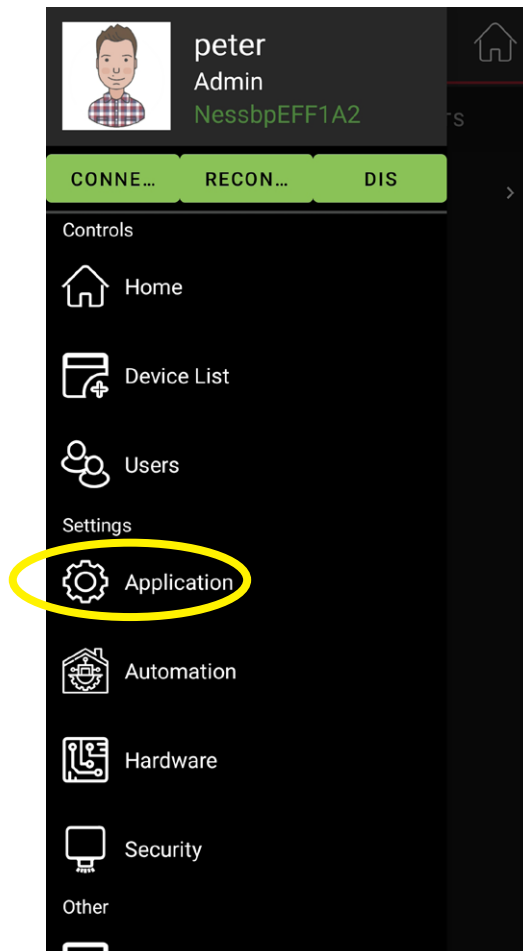
Example PINs. Please create your own unique codes.

- 18 Tap **SAVE**.

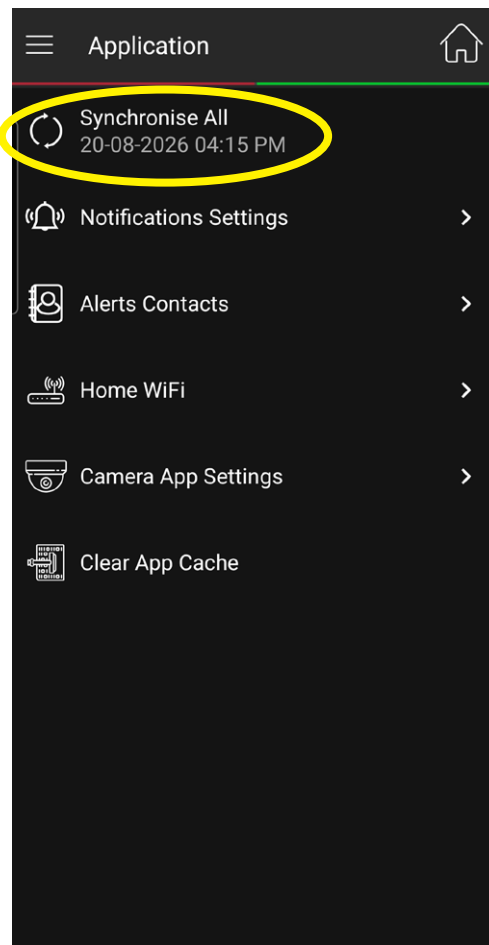
APP SETUP

- 19 Next, synchronise your device settings with the Ness Cloud

Tap the Menu icon  then tap Application.



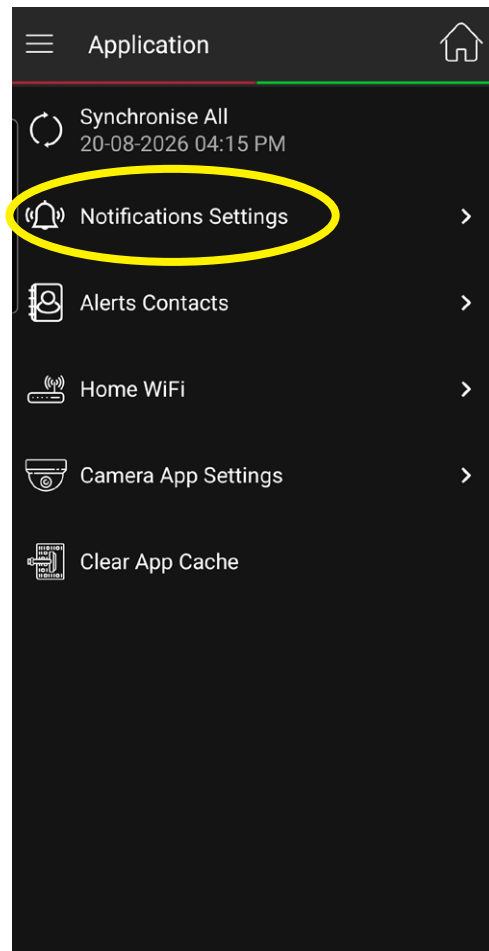
- 20 Tap Synchronise all



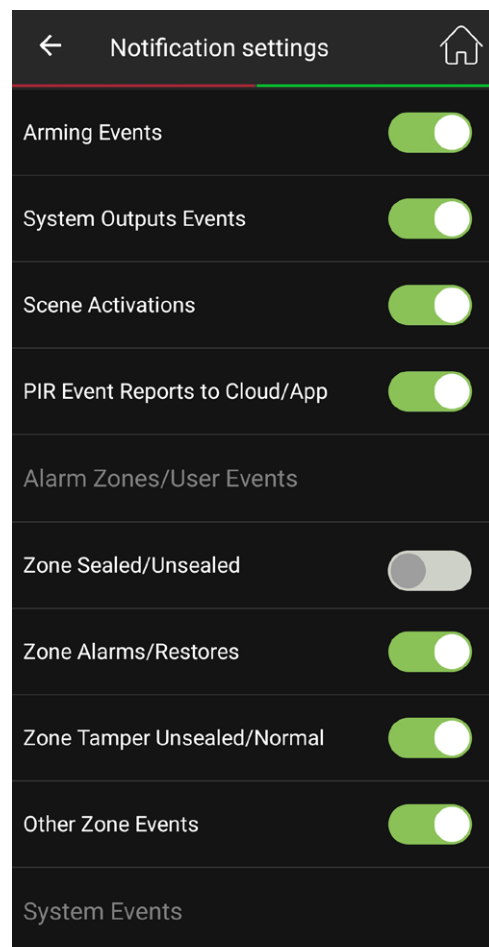
APP SETUP

- 21 You can choose which Push Notifications you'd like to receive on events.

Also in the Application menu, tap Notification Settings



- 22 Most notifications are enabled by default, choose your preferences.





Setting up your Ness panel for IP Reporting via Ness-Bridge Gen2

Applies to Ness DPlus, D8x/D16x

Enabling alarm reporting and programming of central station settings is handled within Ness-Bridge Gen2, so **you don't need to program these parameters in the control panel.**

CHEAT SHEET

- Step 1. Contact Ness Monitoring for details of trade and retail monitoring plans and to arrange a monitoring account. email: monitoring@ness.com.au
- Step 2. Program the settings on the next page in your Ness-Bridge.
- Step 3. Test the system and confirm successful alarm reports with the central station.

Alarm Reporting

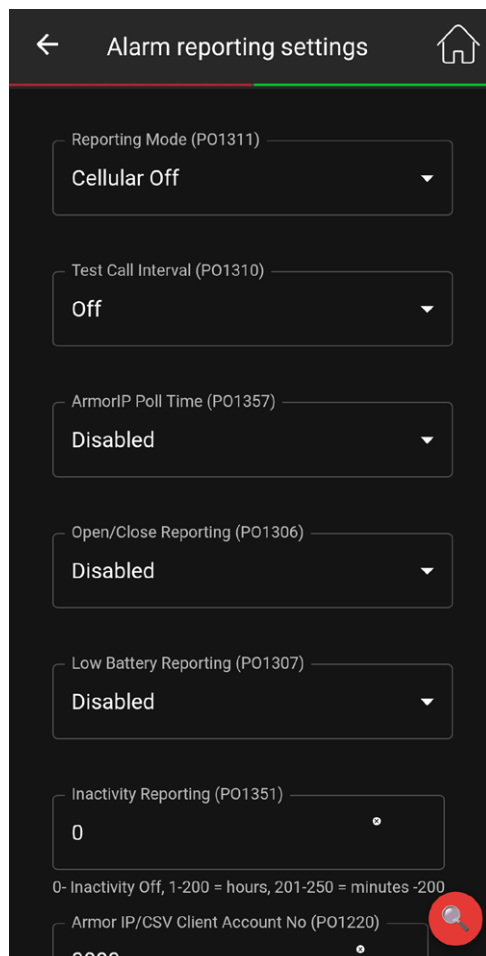
- 23** Optional setup of Alarm Reporting via IP Settings when using Ness-Bridge for back-to-base monitoring to a central station.

Central Station monitoring is a separate paid service offered by Ness Monitoring and third party monitoring companies.

IP Reporting settings in Ness-Bridge should be configured using the details provided by your monitoring provider.

Contact Ness Monitoring for details of trade and retail monitoring plans and assistance with the required settings.

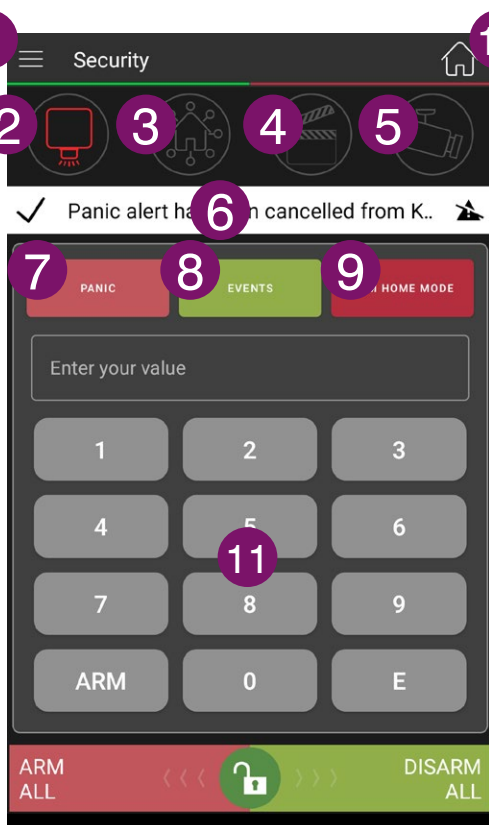
email: monitoring@ness.com.au



Alarm Reporting

SETTING	AVAILABLE OPTIONS	REQUIRED SETTINGS FOR NESS MONITORING
Reporting Mode	Dialler disabled (DEFAULT)	
	ArmorIP report	ON
	CSV IP report	
	CID report (future option)	
	SMS report (future option)	
	Audio report (future option)	
	Cellular off (future option)	
Test Call Interval	Off, 1 day, 7 days, 14 days, 30 days	7 days
ArmorIP Poll time	1hr, 2hrs, 4hrs, 8hrs, 24hrs	
Open/Close reporting	Disabled, Open/Close Only, Restore only, Open/Close/Restore	Open/Close/Restore
Low Battery reporting	Disabled, Main battery low, Device battery low, Any battery low	Any battery low
Inactivity reporting	0=Inactivity off, 1-200=hours, 201-250=minutes -200	
ArmorIP/CSV Client Account Number	[4 digits 0-9999]	[Provided by the central station]
CSV Reporting user name	[Up to 10 characters]	[Optional]
CSV Reporting password	[Up to 10 characters]	[Optional]
IP Reporting TCP/UDP	ArmorIP/CSV UDP ArmorIP/CSV TCP	ArmorIP/CSV UDP
Primary Alarm Reporting Domain Name	[Up to 30 characters]	IP1.realguard.mobi
Primary Alarm Reporting IP address	xxx.xxx.xxx.xxx	
Primary Alarm Reporting Port	[0-65535]	9467
Secondary Alarm Reporting Domain Name	[Up to 30 characters]	IP2.realguard.mobi
Secondary Alarm Reporting IP address	xxx.xxx.xxx.xxx	
Secondary Alarm Reporting Port	[0-65535]	9467

OVERVIEW - Security home screen



The screenshot shows the 'Security' app interface. At the top is a menu bar with a hamburger icon (1), the title 'Security', and a home icon (10). Below the menu bar are five circular icons: a monitor (2), a house with a lock (3), a factory (4), a camera (5), and a car (6). The main area has three tabs: 'PANIC' (7), 'EVENTS' (8), and 'ARM HOME MODE' (9). The 'EVENTS' tab is active, showing a list of events. Below the tabs is a numeric keypad (11) with buttons 1-9, 0, and 'E'. At the bottom is a slider control with 'ARM ALL' on the left, a central padlock icon, and 'DISARM ALL' on the right. Blue arrows indicate the slider can be moved left or right.

- 1 MENU, button
- 2 SECURITY, (this screen)
- 3 DEVICES, shows Zone Status and Virtual Switches
- 4 SCENES, set up 'Scenes' to automate actions and events. Mezzo app guides you step by step when you press + to start creating a Scene
- 5 CCTV, (future option)
- 6 EVENT WINDOW, The most recent event is displayed here
- 7 PANIC, trigger Panic alarm, see page 26
- 8 EVENTS, displays all previous events
- 9 ARM HOME MODE, see page 26
- 10 HOME, goes to app home
- 11 KEYPAD, for manual operation or arming/disarming areas, see page 25

Use the SLIDER for quick arming and disarming in one easy action. Slide left or right to arm or disarm.

The SLIDER also displays the panel's armed state.



Green padlock, panel is disarmed



Red padlock, panel is armed

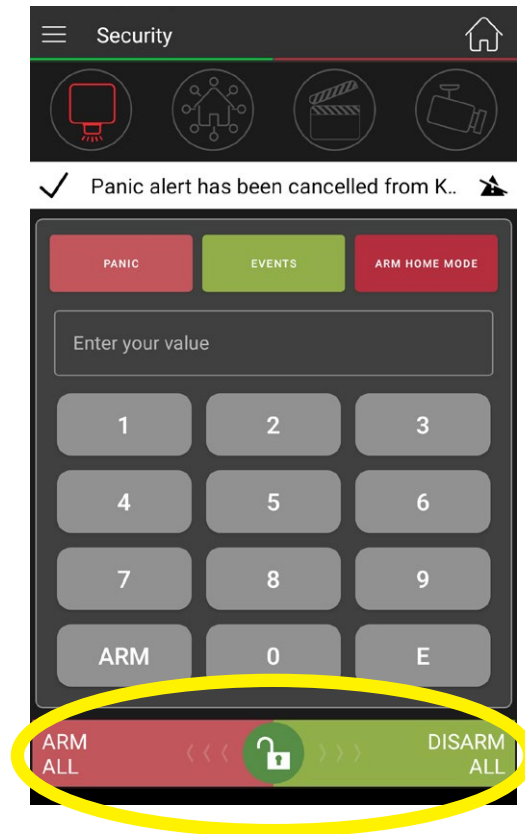


Red padlock with perimeter, panel is armed in Home Mode

OPERATION

ARM and DISARM your panel by swiping the lock slider left to Arm All or swipe right to Disarm All.

This action uses your control panel user code as set up at step 17 to arm and disarm.



ARM / DISARM AREAS

To Arm or Disarm an Area use the app keypad as a virtual keypad.

Same as using the physical keypad simply enter:

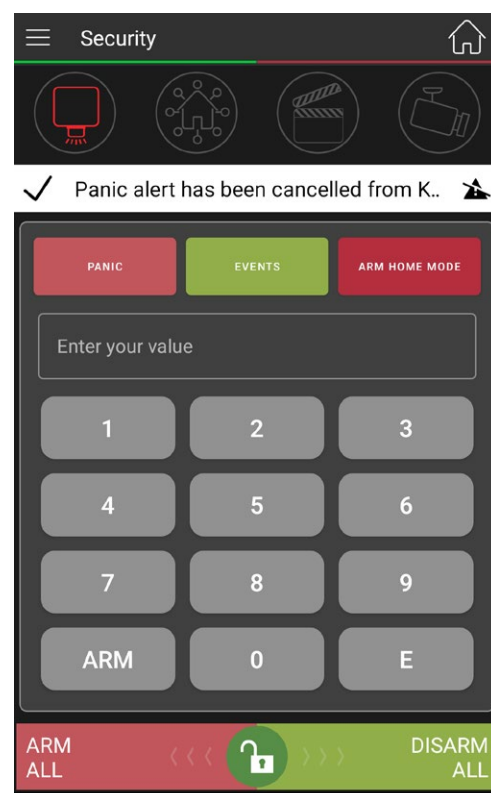
ARM	A [Your User Code] E
DISARM	[Your User Code] E

The Area being operated depends on the setup of each user code in the DPlus/D8/D16 panel.

For example, User Code 1 is assigned to both Areas 1 & 2 by default.

You can also program other user codes and assign them to either Area 1 or Area 2. (this must be programmed at the control panel).

For detail see *Area Partitioning* in the DPlus/D8/D16 Installation Manual.



OPERATION

ARM HOME MODE

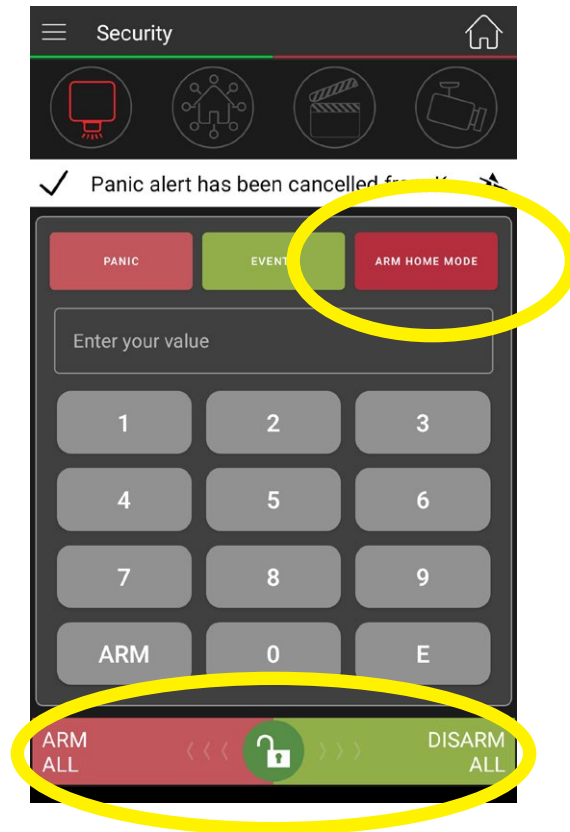
To Arm Home Mode go to *my Security* > *Arm Home Mode*.

INITIAL SETUP

In your DPlus/D8/D16 panel, in Installer Program Mode, P51E, enable the zones which will be armed in Home Mode.

DISARM HOME MODE

To Disarm Home Mode swipe the lock slider right to Disarm All.



PANIC operation

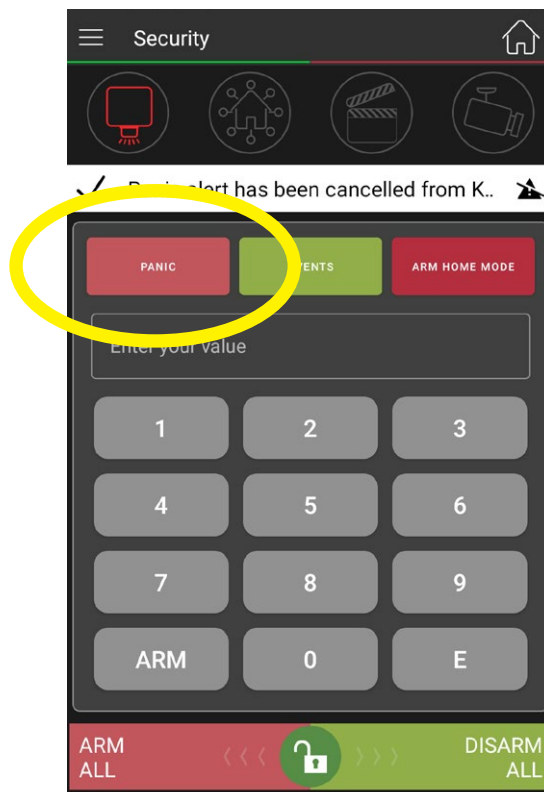
To trigger a Panic alarm press PANIC.

This action will:

- Turn on the siren and strobe (if enabled in the panel).
- Trigger central station reporting¹ (if programmed).
- Send a push notification to the Mezzo app (if enabled).

¹Central station reporting requires monitoring to be enabled either via the DPlus with 4G module or D8/D16 XCEL4G control panel with an active SIM or by activating IP monitoring via Ness-Bridge Gen2.

A central station monitoring account is also required as a separate service.



PANIC function is not available in:
D8/D16 V6.x
D8/D16 V10.8

PANEL SETUP

VIRTUAL SWITCHES (DPlus/D8/D16 OUTPUTS)

Virtual Switches allows you to operate control panel Outputs 1~8 using optional 106-013 Relay Board/s.

INITIAL SETUP

In your DPlus/D8/D16 panel, in Installer Program Mode enable 'keypad operation' for the required outputs.
See P141E~P144E, enable 4E.

Requires optional 106-013 Relay Board/s or 106-011 Output Expander.

xxx corresponds to:
P141E Panel Output 1
P142E Panel Output 2
P143E Panel Output 3
P144E Panel Output 4

DPlus/D8/D16 panel, Installer Program Mode.

KPX+	PxxxE 4E enable the option to allow operation of the output via Mezzo app
NAVIGATOR	PxxxE > enable 4E

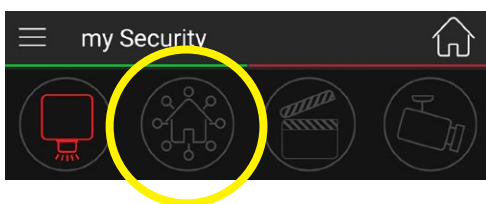
Refer to the DPlus/D8/D16 Installer Manual for further detail and setup options for additional outputs.

Operation of outputs via Mezzo app is not available in D8/D16 V6.x and D8/D16 V7.x

OPERATION

TURN OUTPUTS ON/OFF

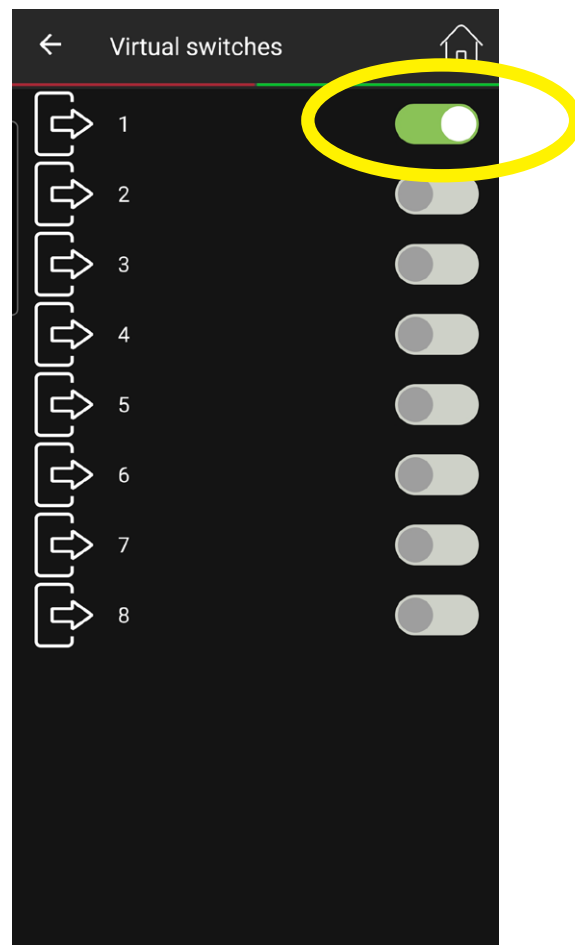
To operate DPlus/D8/D16 outputs go to *my Security > Zones & Outputs*.



Tap each output's switch to toggle on and off.



Operation of OUTPUTS via Mezzo app is not available in:
D8/D16 V6.x
D8/D16 V7.x



SPECIFICATIONS

NESS-BRIDGE PCB DIMENSIONS	92 x 65 x 18mm
INTERFACE	RJ45 Ethernet to local LAN / 4-wire loom to control panel
CONNECTIVITY	Ethernet (auto default), WiFi 2.4GHz / 5GHz
COMMS	IP Monitoring via ArmorIP, CSV protocols
MAX. DEVICES PER MEZZO APP	10
POWER REQUIREMENT	13.8V DC via 4-wire loom to control panel
AVERAGE CURRENT DRAW	50mA
COMPATIBILITY	Ness DPlus, D8XD / D16XD (Rev6 and later), D8XCEL 4G / D16XCEL 4G

Outputs require optional 106-013 Relay Board/s. Other conditions apply, refer to the manual.

Operation of outputs via Mezzo app is not supported in D8/D16 V6.x to V7.x

PANIC function is not available in D8/D16 V6.x and D8/D16 V10.8

