

Alarm.com Water Dragon ADC-SHM-100-A Manual

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Alarm.com

Water Dragon

SKU: ADC-SHM-100-A

ZWave+

Security V2

Quickstart

This is a
secure
Notification Sensor DT
for

To run this device please connect it to your mains power supply.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law.

The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material.

Use this equipment only for its intended purpose. Follow the disposal instructions.

Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.

Product Description

The Alarm.com Smart H2O Monitor is a non-intrusive water leakage detection device for residential and light commercial installation, giving property owners peace of mind.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state**. Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Safety Warning for Mains Powered Devices

ATTENTION: only authorized technicians under consideration of the country-specific installation guidelines/norms may do works with mains power. Prior to the assembly of the product, the voltage network has to be switched off and ensured against re-switching.

Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Dont poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Association – one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

Group Number	Maximum Nodes	Description
1	4	

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 ... 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200 it may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 1: HI_FLOW_THRESH

See manual

Size: 1 Byte, Default Value: 28

Setting	Description
0	0

Parameter 10: LO_PTEMP_THRESH

See manual

Size: 2 Byte, Default Value: 40

Setting	Description
0	0

Parameter 11: HI_PTEMP_THRESH

See manual

Size: 2 Byte, Default Value: 650

Setting	Description
0	0

Parameter 12: LO_PTEMP_RESP

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 13: HI_PTEMP_RESP

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 14: HEARTBEAT_PRD

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 15: METER_GRANU

See manual

Size: 1 Byte, Default Value: 40

Setting	Description
0	0

Parameter 16: FLOWRATE_GRANU

See manual

Size: 1 Byte, Default Value: 20

Setting	Description
0	0

Parameter 17: TEMP_GRANU

See manual

Size: 1 Byte, Default Value: 20

Setting	Description
0	0

Parameter 19: CALIBRATED

See manual

Size: 4 Byte, Default Value: 0

Setting	Description
0	0

Parameter 2: MED_FLOW_THRESH

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 29: PRD_ERR_THRESH

See manual

Size: 1 Byte, Default Value: 30

Setting	Description
0	0

Parameter 3: LO_FLOW_THRESH

See manual

Size: 1 Byte, Default Value: 19

Setting	Description
0	0

Parameter 30: PRD_MIN_PERIOD

See manual

Size: 1 Byte, Default Value: 2

Setting	Description
0	0

Parameter 31: PRD_CLEAR_TIME

See manual

Size: 1 Byte, Default Value: 60

Setting	Description
0	0

Parameter 33: HI_FLOW_THRESH2

See manual

Size: 1 Byte, Default Value: 30

Setting	Description
0	0

Parameter 34: MED_FLOW_THRESH2

See manual

Size: 1 Byte, Default Value: 6

Setting	Description
0	0

Parameter 35: LO_FLOW_THRESH2

See manual

Size: 1 Byte, Default Value: 19

Setting	Description
0	0

Parameter 36: HI_FLOW_RESP2

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 37: MED_FLOW_RESP2

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 38: LO_FLOW_RESP2

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 39: HI_FLOW_TIMER2

See manual

Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 4: HI_FLOW_RESP

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 40: MED_FLOW_TIMER2

See manual

Size: 1 Byte, Default Value: 40

Setting	Description
0	0

Parameter 41: LO_FLOW_TIMER2

See manual

Size: 2 Byte, Default Value: 4

Setting	Description
0	0

Parameter 46: ULTRASONIC_FREQ

See manual

Size: 2 Byte, Default Value: 1340

Setting	Description
0	0

Parameter 47: PULSE_COUNT

See manual

Size: 2 Byte, Default Value: 8

Setting	Description
0	0

Parameter 48: RX_GAIN

See manual

Size: 1 Byte, Default Value: 52

Setting	Description
0	0

Parameter 49: AGC_ENABLE

See manual

Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 5: MED_FLOW_RESP

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 50: RX_ATTENUATE

See manual

Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 51: ENV_THRESHOLD

See manual

Size: 2 Byte, Default Value: 33

Setting	Description
0	0

Parameter 52: CAPTURE_START

See manual

Size: 2 Byte, Default Value: 72

Setting	Description
0	0

Parameter 53: CAPTURE_WINDOW

See manual

Size: 2 Byte, Default Value: 20

Setting	Description
0	0

Parameter 54: PIPE_INFO

See manual

Size: 1 Byte, Default Value: 255

Setting	Description
0	0

Parameter 56: DTOF_OFFSET

See manual

Size: 2 Byte, Default Value: 0

Setting	Description
0	0

Parameter 58: FLOW_DIRECTION

See manual

Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 59: PRD_MIN_THRESH

See manual

Size: 1 Byte, Default Value: 100

Setting	Description
0	0

Parameter 6: LO_FLOW_RESP

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 60: DTOF_NOISE

See manual

Size: 2 Byte, Default Value: 0

Setting	Description
0	0

Parameter 64: CALIBR_FEEDBACK

See manual

Size: 2 Byte, Default Value: 0

Setting	Description
0	0

Parameter 65: HI_FLOW_THRESH3

See manual

Size: 1 Byte, Default Value: 30

Setting	Description
0	0

Parameter 66: MED_FLOW_THRESH3

See manual

Size: 1 Byte, Default Value: 6

Setting	Description
0	0

Parameter 67: LO_FLOW_THRESH3

See manual

Size: 1 Byte, Default Value: 19

Setting	Description
0	0

Parameter 68: HI_FLOW_RESP3

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 69: MED_FLOW_RESP3

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 7: HI_FLOW_TIMER

See manual

Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 70: LO_FLOW_RESP3

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 71: HI_FLOW_TIMER3

See manual

Size: 1 Byte, Default Value: 1

Setting	Description
0	0

Parameter 72: MED_FLOW_TIMER3

See manual

Size: 1 Byte, Default Value: 40

Setting	Description
0	0

Parameter 73: LO_FLOW_TIMER3

See manual

Size: 2 Byte, Default Value: 4

Setting	Description
0	0

Parameter 8: MED_FLOW_TIMER

See manual

Size: 1 Byte, Default Value: 40

Setting	Description
0	0

Parameter 80: RESET_DEVICE

See manual

Size: 2 Byte, Default Value: 0

Setting	Description
0	0

Parameter 81: SELECT_PARAM_SET

See manual

Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 82: DISABLE_MULTIREP

See manual

Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 84: DISABLE_MONITOR

See manual

Size: 1 Byte, Default Value: 0

Setting	Description
0	0

Parameter 85: DISABLE_TIMEOUT

See manual

Size: 1 Byte, Default Value: 4

Setting	Description
0	0

Parameter 86: PRD_BUF_LENGTH

See manual

Size: 1 Byte, Default Value: 8

Setting	Description
0	0

Parameter 9: LO_FLOW_TIMER

See manual

Size: 2 Byte, Default Value: 2

Setting	Description
0	0

Technical Data

Hardware Platform	ZGM130S037HGN2 / ZGM130S037HGN1
Device Type	Notification Sensor DT
Network Operation	Always On Slave
Firmware Version	HW: 01 FW: 00.25:00.20
Z-Wave Version	7.16.3
Certification ID	ZC14-22100149
Z-Wave Product Id	0x0094.0x0007.0x0004
Security V2	S2_UNAUTHENTICATED ,S2_AUTHENTICATED
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info V3
- Association V2

- Configuration V4
- Device Reset Locally
- Firmware Update Md V5
- Indicator V3
- Manufacturer Specific V2
- Meter V2
- Multi Channel Association V3
- Sensor Multilevel V11
- Notification V8
- Powerlevel
- Security 2
- Supervision
- Transport Service V2
- Version V3
- Zwaveplus Info V2

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network.
Controllers are typically Gateways, Remote Controls or battery operated wall controllers.
- **Slave** — is a Z-Wave device without capabilities to manage the network.
Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- **Inclusion** — is the process of adding new Z-Wave devices into a network.
- **Exclusion** — is the process of removing Z-Wave devices from the network.
- **Association** — is a control relationship between a controlling device and a controlled device.
- **Wakeup Notification** — is a special wireless message issued by a Z-Wave device to announces that is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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