

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair or calibration,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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Industry Canada Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

This device has been designed to operate with the supplied internal antennas only.

CE Statement

The following alert sign indicates that there are restrictions on usage of the equipment in regards to power limitations on Equivalent Isotropic Radiated Power (EIRP) levels in the European Community.

The Following are user Restrictions:

- Combinations of power levels and antennas resulting in a radiated power level above 10 mW - EIRP for Direct Sequence Spectrum (DSSS) devices are considered as not compliant, and are not allowed for use within the European Community and other countries that have adopted the European R&TTE directive 2014/53/EU or the CEPT recommendation ERC/REC 70-03 or both.
- This device have been designed to operate with antennas having a maximum gain of 2.2 dBi. Antennas having a gain greater than 2.2 dBi are strictly prohibited for use with this device. The required antenna impedance is 50 Ω.

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SAFETY & REGULATORY COMPLIANCE

Safety: EN 61010-1 3rd Edition

EMC: EN 61326-1:2013

Radio: EN 300 328 V1.8.1:2012-04

CE ⚠ : The product herewith complies with the essential requirements and other relevant provisions of the Radio Equipment Directive 2014/53/EU, the EMC Directive 2014/30/EU, and the Low Voltage Directive 2014/35/EU, and carries the CE-marking accordingly.

The following CE Mark is affixed to this equipment. The CE declaration is available at the website listed on the cover page of this manual.

FCC/IC:

Part 15C, Class DTS Intentional radiator

Contains TX FCC ID: TYOJN5168M5

Contains Industry Canada ID IC: 7438A-CYO5168M5

FCC Radiation Exposure Statement:

This portable equipment with its antenna complies with FCC's RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance follow the instructions below;

1. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. Avoid direct contact to the antenna, or keep it to a minimum while using this equipment.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

QUICK START

For complete product manual:
www.omega.com/manuals/manualpdf/M5686.pdf



ZW-CM Wireless Environmental Sensor

OMEGA™

omega.com info@omega.com

Servicing North America:

U.S.A. Headquarters: Omega Engineering, Inc.
Toll-Free: 1-800-826-6342 (USA & Canada only)
Customer Service: 1-800-622-2378 (USA & Canada only)
Engineering Service: 1-800-872-9436 (USA & Canada only)
Tel: (203) 359-1660 Fax: (203) 359-7700
e-mail: info@omega.com

For Other Locations Visit omega.com/worldwide

START HERE

Using This Quick Start Manual

Use this Quick Start Manual to set up your ZW-CM Wireless Transmitter.

For complete information on all setup options see the user manual available at omega.com/manuals.

SAFETY CONSIDERATION

The instrument is a device protected in accordance with 2014/35/EU Electrical Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory.



This instrument is marked with the international Caution symbol.

This device is not designed for use in, and should not be used for, patient-connected applications.

SAFETY:

- Only use Alkaline AA batteries.
- Do not operate this instrument in flammable or explosive atmospheres.
- Do not expose this instrument to rain or moisture.

EMC:

- Whenever EMC is an issue use shielded cables.
- Never run signal and power wires in the same conduit.
- Use signal wire connections with twisted-pair cables.
- If EMC problems occur Install Ferrite Bead(s) on signal wires close to the instrument.

Required Tool and Equipment

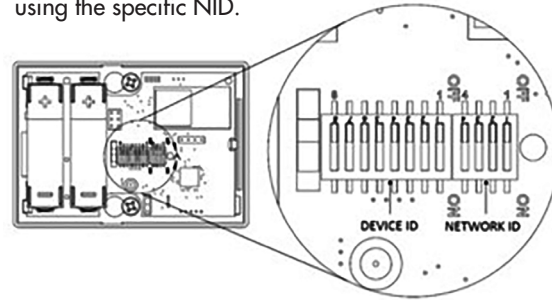
Before Installing the ZW-CM Wireless transmitter make sure you have the following items:

- Philips Screwdriver

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Configuring

The ZW-CM transmitter communicates with a ZW-REC receiver using a specific Network ID (NID) and Device ID (DID). The NID settings must be the same as the NID setting on the receiver while the Device ID (DID) must be unique among all transmitters using the specific NID.



Switch Locations

The default NID setting is 0 (all switches off). Ensure that the NID switch setting matches that of the ZW-REC receiver.

For installations requiring a single ZW-REC a NID setting of 0 is recommended

The default Device ID setting is 0. In applications where more than one transmitter are to be used the transmitter Device ID's may be assigned sequential addresses. Switch 7 should always be OFF.

After setting the NID and DID switches power cycle the device. The LED should flash several times and will then start flashing at the default 1 sample per 10 second rate.

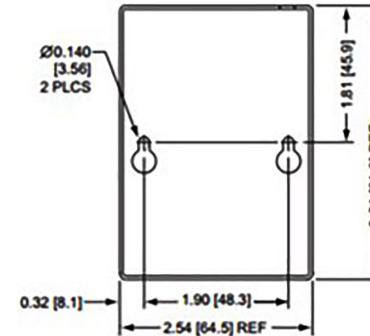
Switch								DID
7	6	5	4	3	2	1	0	
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	0
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	1
OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	2
...								
OFF	ON	ON	ON	ON	ON	ON	ON	126
OFF	ON	ON	ON	ON	ON	ON	ON	127

All further configuration is done thru the ZW-REC web page or configuration software. Refer to the ZW-REC manual for a description of how to set the sample rate and other application specific parameters.

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Mounting

The ZW-CM includes all required hardware for mounting. To mount the ZW-CM, position unit where required. Mark the location of the top center of the unit. Mark and drill two pilot holes as indicated. Use the included drywall anchors if needed. Open the lid of the ZW-CM to access the mounting points. Use the included screws to secure the ZW-CM.



When the ZW-CM transmits, it reports its Received Signal Strength to the Receiver. This reading can be viewed on your ZW-REC web page and indicates how well the ZW-CM can hear the Receiver. The received signal strength is important because each transmission sent by the ZW-CM must be confirmed by the Receiver. If the ZW-CM does not receive a confirmation it will retry sending the data until successful.

Under favorable conditions the ZW-CM can achieve a, line of sight, wireless link distance of up to 300m. Generally, most indoor applications will not be able to achieve these distances, although steps can be taken to maximize range. Ensure the Receiver and End Device are located away from large obstacles and other RF sources such as Wireless Access points and microwaves. Keep objects clear of the zone between the End Device and Receiver. Metal objects, walls, and cubical partitions in particular will all significantly reduce the signal strength.

For long distance connections the ZW-CM and the Receiver should be elevated to keep the signal from being attenuated by the ground. Elevate each device by at least 0.6 meters above the ground for each 100 meters or separation. It is best to keep this same clearance distance to walls, ceilings and other obstructions as well.

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Wireless Certifications

Federal Communication Commission Interference Statement



In order to comply with FCC radio frequencies (RF) exposure limits, dipole antennas should be located at a minimum 7.9" (200 mm) or more from the body of all persons.

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

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and radiates radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference. However, there is no guarantee that interference will not occur. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from which the receiver is connected.
- Consult dealer or an experienced radio/TV technician.