

TrolMaster

TWS-1

TrolMaster Wireless Station



For Hydro-X Pro

◆ CAUTION

1. Read all instructions carefully before installation.
2. This product is not intended for use by any persons and children with reduced physical, sensory or mental capabilities or lack of experience and product knowledge.
3. The device is designed to be installed **INDOORS IN A SPACE THAT IS PROTECTED FROM RAIN AND FLOODING.**
4. **DO NOT** clean the exterior of the enclosure with any chemicals that might cause damage. To clean the enclosure... Use a damp cloth only.

◆ OVERVIEW

The TWS-1 Wireless Station enables you to use TrolMaster sensors and devices wirelessly with your existing Hydro-X Pro Controller (HCS-2). The TWS-1 is the core of the wireless system, designed to convert wired and wireless protocols, thus building a scalable, solid communication link between the HCS-2 controller, sensors, and devices. The TWS-1 provides a wiring-free option for TrolMaster's future wireless product development, to enhance user experiences by offering the option to connect sensors and devices wirelessly.

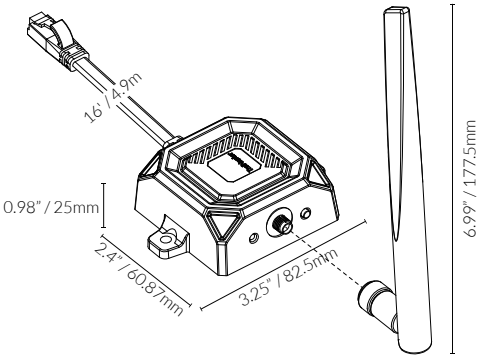
◆ PACKAGE CONTENT

- 1 x TrolMaster Wireless Station (TWS-1)
- 1 x Antenna
- 2 x Phillips Head Screws (0.05in / 1.28mm)

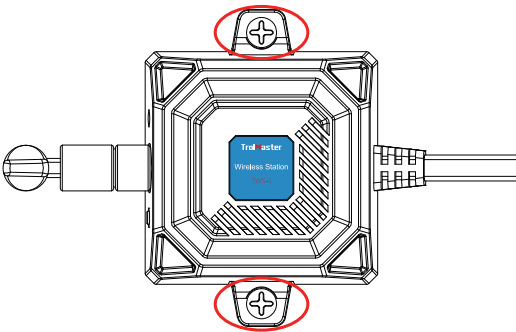
◆ SPECIFICATION

Input Voltage:	12V, 80mA
Working Environment:	Temperature: 32°-122°F Humidity: ≤90%
Wireless Standard:	915Mhz Lora
Product Dimensions:	Unit: 60mm x 82.5mm x 25mm Screw Size: Phillips Head (0.05" / 1.28mm) RJ12 cable: 16ft (4.9m) Antenna: 6.99" (177.5mm)
Product Weight:	0.42 lbs
Maximum Range (Without Interference):	1mile / 1.6km
FCC ID:	2A33F-TWS-1

◆ DIMENSION



◆ HOW TO INSTALL

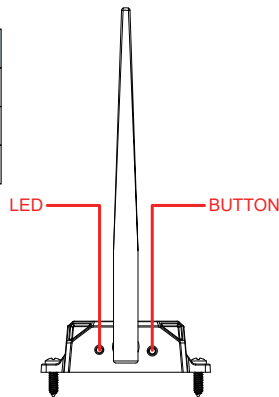


- The TWS-1 can be mounted directly on any wall surface with appropriate fasteners to secure. (*Do not place TWS-1 inside metal enclosures or else the signal may be affected.)
- Fasten the antenna to the wireless station
- Connect the wireless station to the Hydro-X Pro's sensor port to connect sensors or the device port to connect device modules wirelessly.

◆ OPERATION INSTRUCTIONS

There is a manual push-button and a LED indicator on the TWS-1 antenna side. The button can be used to pair the wireless station to the controller or to reset the addressing between sensors or device modules and the TWS-1 itself.

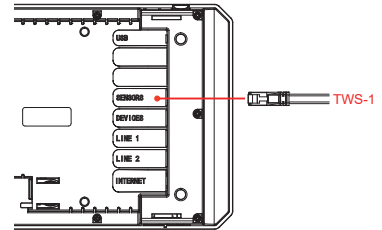
LED Indication	Message
No Light	No Power
Flashing Green	Stand By
Solid Green	Paired to Controller



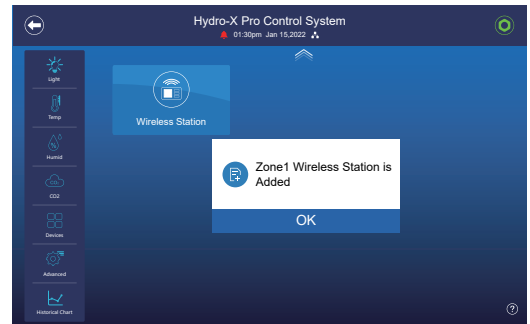
◆ ADDRESSING INSTRUCTIONS

How to add the TWS-1 to the Hydro-X Pro

- make sure that your HCS-2 controller is updated to the most recent firmware.

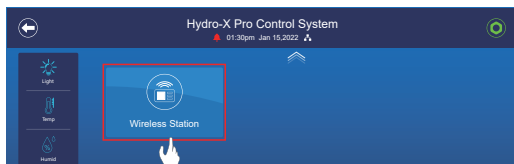
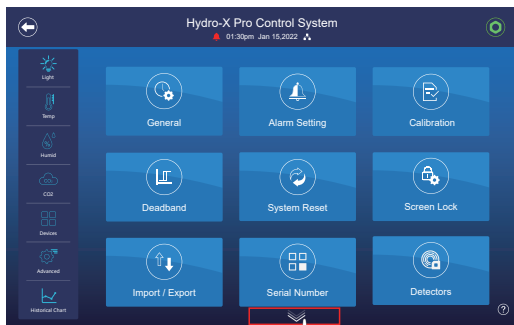


- Connect the TrolMaster Wireless Station (TWS-1) to the Hydro-X Pro (HCS-2) Sensor port.

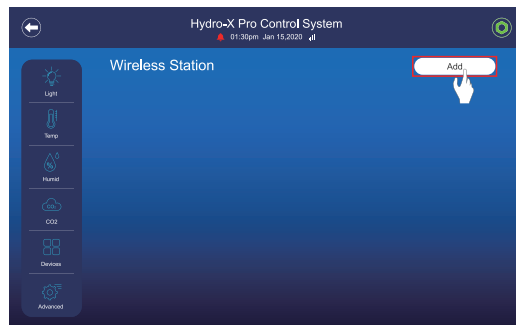


- Press and release the button quickly on the TWS-1 to pair the TWS-1 to the main controller. A "pairing successful" message will appear on the HCS-2 display when successful.

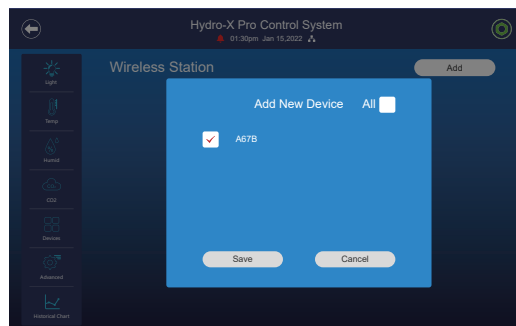
◆ WIRELESS PARING INSTRUCTIONS



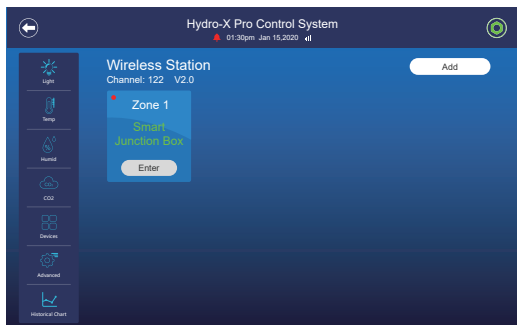
- On the HCS-2 controller screen, go to "Setting" and tab down to the next page. Then go to the "Wireless Station" menu. If the icon does not appear, try pairing again.



- Press the "Add" button in the top-right corner to add a new device.



- Device(s) will show up on the "Scanning New Device" window with the pairing ID provided.



- Once the device(s) is paired, it will show up in the "Wireless Station" menu.

CAUTION: For instructions on how to pair the specific device/sensor to the TWS-1, please check the manual from the device/sensor unit.

FCC Statement

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.

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

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

WARNING: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

ISED Canada Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de classe B est conforme à la norme CES-003 du Canada.

This device contains licence-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS-102 and compliance with RSS-102RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS-102 et la conformité à l'exposition de RSS-102rf, utilisateurs peuvent obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

! WARNING : DO NOT allow the TrolMaster Wireless Station to be exposed to water or excessive heat. DO NOT open or attempt to repair or disassemble the module, as there are no user-serviceable parts inside. Opening the module will void the warranty.

If the surface of the TrolMaster Wireless Station is dirty, wipe it with a dry towel. The TrolMaster Wireless Station operates under natural ventilation conditions.

! AVERTISSEMENT : NE PAS exposer la station sans fil TrolMaster à l'eau ou à une chaleur excessive. NE PAS ouvrir ni tenter de réparer ou de démonter le module, car il ne contient aucune pièce réparable par l'utilisateur. L'ouverture du module annulera la garantie.

Si la surface de la station sans fil TrolMaster est sale, essuyez-la avec une serviette sèche. La station sans fil TrolMaster fonctionne dans des conditions de ventilation naturelle.



If you have any questions, please contact us:

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