


# DXi-WOB-E-EXP and DXi-WOB-E-P-EXP XTND Radio Kit *Installation Guide*

**TORO**

## Introduction

This kit enables Wireless Output Board control from a DXi Sentinel controller to up to 4 Wireless Output Boards (WOBs). The kit uses wireless radio communication in the 900MHz unlicensed radio frequency band.


## Installation Instructions

 **CAUTION:** Power off the controller prior to installing expansion kits.



**CAUTION:** DXi serviceable parts shall be installed by qualified personnel familiar with the product and with local electrical code requirements. DXi serviceable parts shall not be used or installed in product other than DXi Product Series. Failure to do so will void product's safety and FCC certification. If used in product other than DXi Product Series, additional safety and FCC testing shall be considered as part of the end product assessment and usability.

Within the kit is the control interface between the controller's firmware and the kit's radio transceiver. All elements of the kit are included in the module, along with an RF cable to the 900MHz antenna that will be mounted outside the enclosure.

 For PPED (plastic pedestal) enclosures, the antenna is the supplied whip antenna that is attached at the module's RF connector *inside* the PPED (see **Figure 5**).

This document illustrates how to mount the antenna and module for the following DXi enclosures:

- DXI-PWM08
- DXI-PWMTW
- DXI-SWM08
- DXI-SWMTW
- DXI-SPED08
- DXI-SPEDTW
- DXI-SPEDHY08
- DXI-PSB08
- DXI-PSBTW
- DXI-DPSB56
- DXI-PPED08
- DXI-PPEDTW

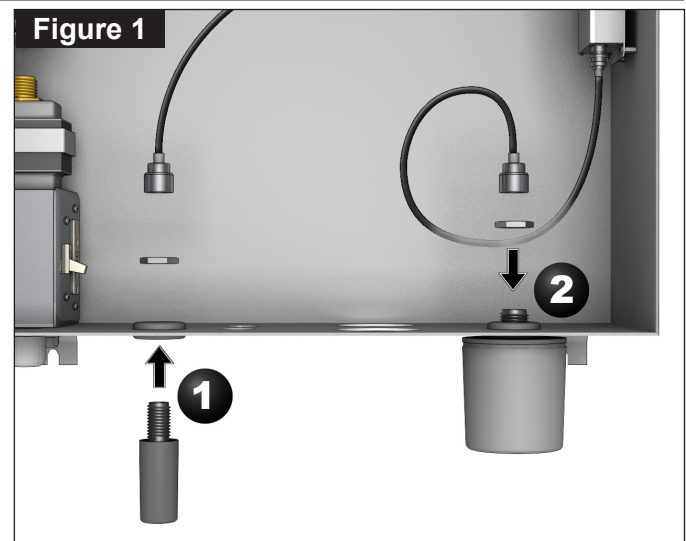
For all enclosures (except the PPED), the antenna is attached on the outside of the enclosure and the RF cable is run through the knockout in the body to connect to the RF connector on the module.

The module itself is slid into the bracket where it is held securely by the bracket arms, no screws required.

## Antenna Installation

To install an antenna in a DXi enclosure (procedure is same whether knockout is on top or bottom of enclosure):

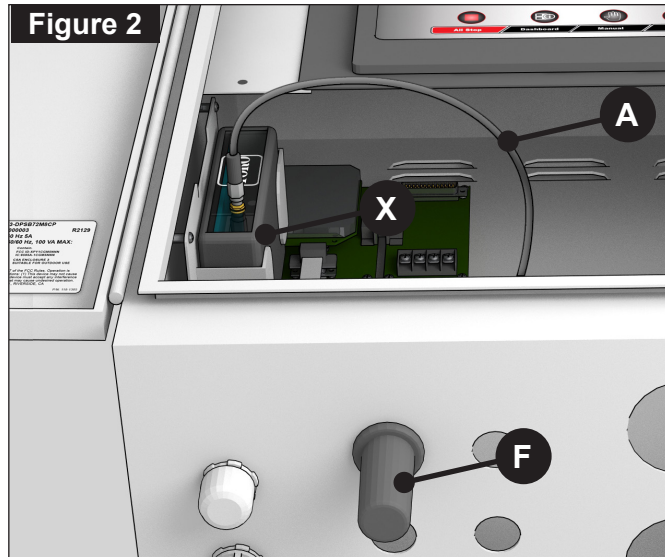
- 1** Insert included rubber grommet into the enclosure hole for the antenna.  
Insert antenna threading through the hole.
- 2** Secure the large nut and antenna connector to threading of antenna.



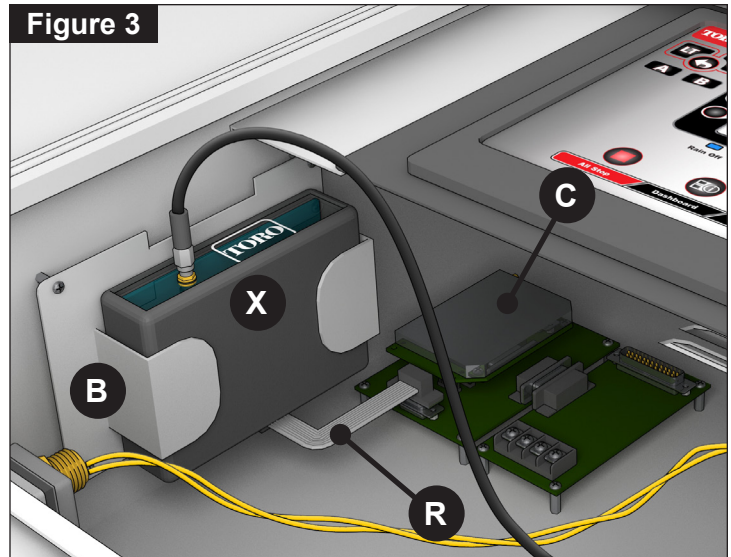
**WARNING:** Cancer and Reproductive harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).  
For more information, please visit [www.toro.com/CAProp65](http://www.toro.com/CAProp65).

## Wallmount (WM)

Part	Description
118-5396	ribbon cable <b>R</b> to connect the XTND module 118-7909 <b>X</b>
118-3337	steel bracket <b>B</b> used to mount the XTND module 118-7909 <b>X</b> .

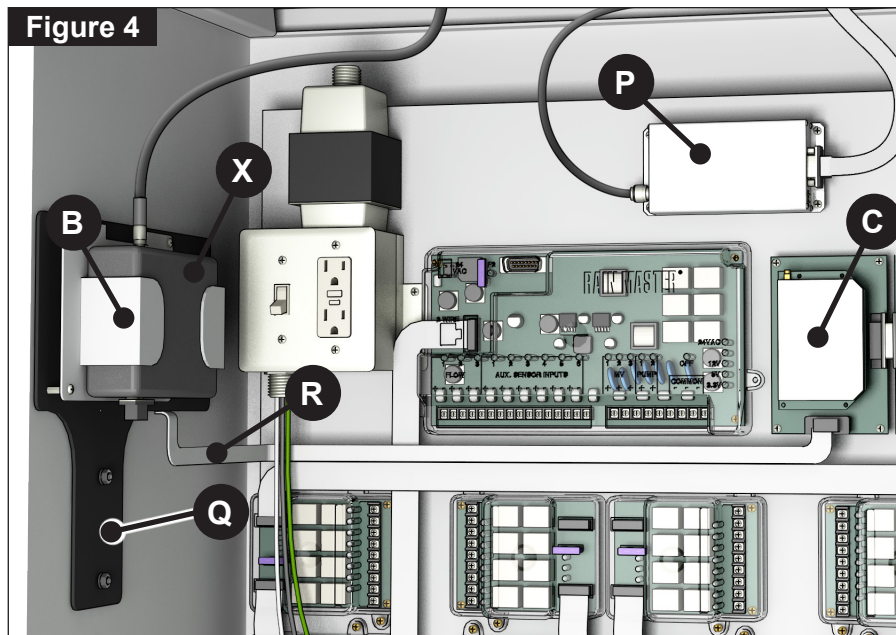


RF cable 118-4344 **A** connects antenna and module. It is screwed onto the RP-SMA connector on the module end **X** and attached to the mounted antenna **F** on the enclosure end. See Antenna Installation section on page 3 for installation directions.



Ribbon cable **R** connects XTND module **X** to COM OPTION board **C**. The module is mounted into the metal bracket **B** arms.

## Stainless Pedestal (PSB) and Double-wide Stainless Pedestal (DPSB)

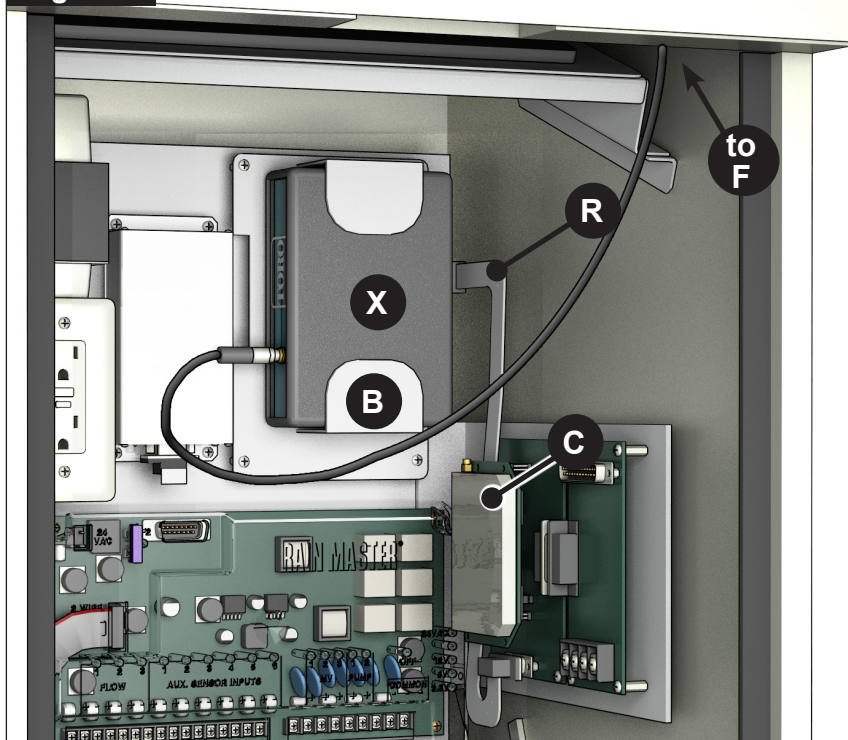


Ribbon cable 118-5396 **R** connects the COM OPTION board **C** to the XTND module **X**. The module **X** is housed in metal bracket 118-3337 **B** which is, in turn, mounted on 118-7276 **Q**. In this illustration, Pro Max **P** is installed. See **Figure 7** for locations of the Pro Max antenna **G** and the XTND Module antenna **F**.

## Stainless Steel Pedestal (SPED)

Part	Description
510-0010	screws to fasten bracket 118-3337 <b>B</b> to enclosure
363-7124	Externally mounted antenna <b>F</b>
363-7123	Vandal-proof antenna mount kit (for 363-7124)

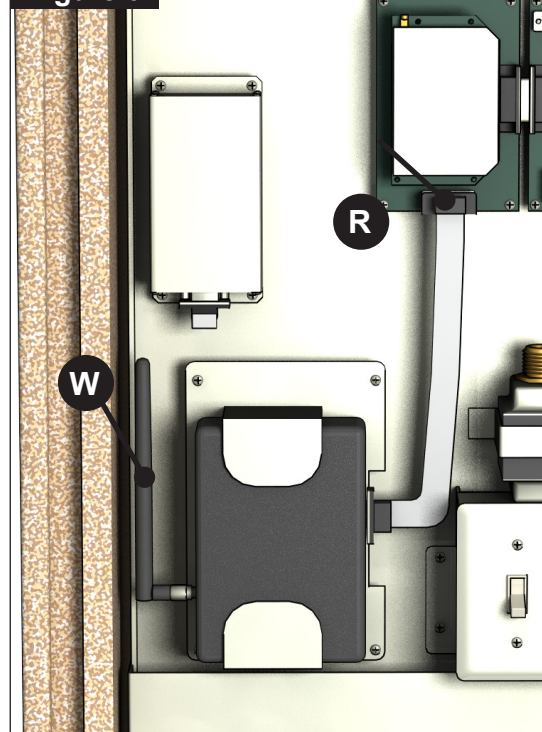
**Figure 5**



Module 118-7909 **X** is placed inside steel bracket 118-3337 **B**.  
 Bracket 118-3337 mounts directly to the cabinet using standoffs 363-7435.  
 Ribbon cable **R** connects to XTND module **X** to COM OPTION board **C**.  
 Module antenna cable goes to 363-7124 **F** (see Figure 7).

## Plastic Pedestal (PPED)

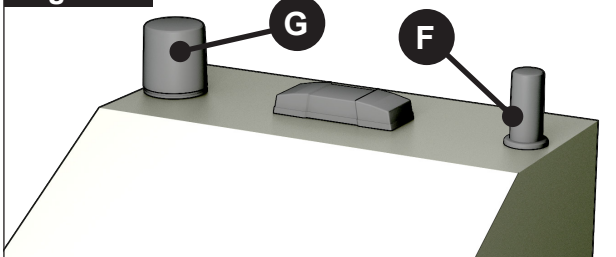
**Figure 6**



Similar to Figure 4, ribbon cable 118-5396 **R** connects the XTND radio to the COM OPTION board. The module is housed in metal bracket 118-3337.

The antenna for the PPED is the included whip antenna **W**.

**Figure 7**



XTND Module antenna 363-7124 **F** is mounted through a punch-out on the top of the lid.  
 (If Pro Max installed, **G** is Pro Max antenna.)

## FCC & IC Label Sticker

It is important to keep track of what wireless devices are installed in your DXi controller.

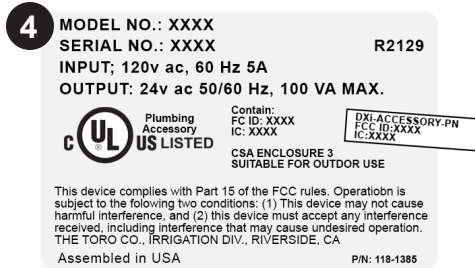
Each DXi controller ships with a label showing important information such as Model number, Serial number, UL certification, and more **1**.

Depending on the enclosure, this label might be found on the interior side of the enclosure door **2**.

- If your DXi controller ships with a wireless device, the label will show the FCC ID and IC ID **1**.
- If your DXi controller does *not* ship with a wireless device, the label will be blank in that area.

The XTND radio kit ships with a small sticker label with its FCC ID and IC ID **3**.

- If your DXi controller label is blank in that area, adhere the FCC sticker to that blank area.
- If your DXi controller label already has FCC ID and IC ID information in that area, adhere the FCC sticker adjacent to it as illustrated **4**.



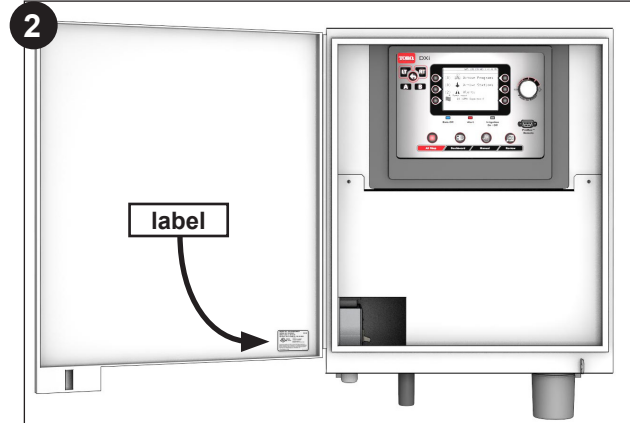
**1** MODEL NO.: XXXX  
 SERIAL NO.: XXXX R2129  
 INPUT; 120v ac, 60 Hz 5A  
 OUTPUT: 24v ac 50/60 Hz, 100 VA MAX.

 Contain:  
 FC ID: XXXX  
 IC: XXXX

CSA ENCLOSURE 3  
 SUITABLE FOR OUTDOOR USE

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. THE TORO CO., IRRIGATION DIV., RIVERSIDE, CA

Assembled in USA P/N: 118-1385



Illustrative purposes only.  
 FCC label location differs depending on enclosure type.

## FCC Statement

This product contain a modular approval with FCC ID MCQ-XBPSX and IC 1846A-XBPSX.

This equipment has been tested and found to comply with the limits for a Class A 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 commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## IC Statement

This device contains licence-exempt transmitter(s)/receiver(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, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/recepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'innovation, Science 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, et
- (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with FCC and ISED RF radiation exposure limits set forth for genral population. This device must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Le present appareil est conforme aux niveaux limites d'exigences d'exposition RF aux personnes définies par ISDE. L'appareil doit être installé afin d'offrir une distance de séparation d'au moins 20cm avec les personnes et ne doit pas être installé à proximité ou être utilisé en conjonction avec une autre antenne ou un autre émetteur.



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