

DXi-WIFI-EXP WiFi Kit

Installation Guide



Introduction

The DXi-WIFI-EXP kit allows the Toro DXi irrigation controller to communicate with the Central via wifi. This document illustrates how to mount the wifi kit in the following DXi base models:

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

Note: The WiFi module is compatible with 802.11 (b,g,n) networks only.

Kit Components

- one (1) wifi modem attached to DXi comm expansion board
- wifi antenna
- wifi antenna cable
- mounting screws
- stand-offs

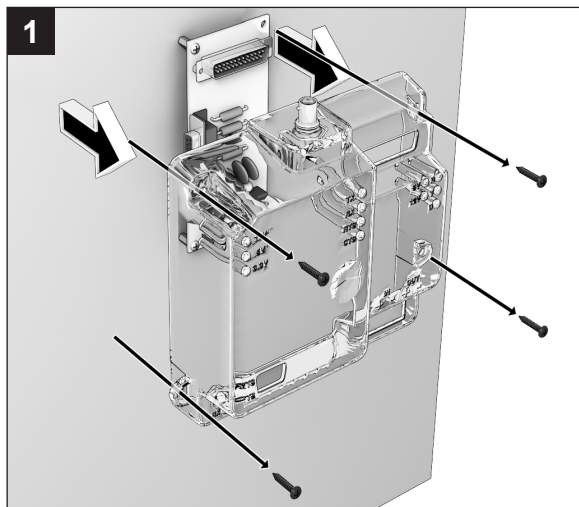
Installation Instructions



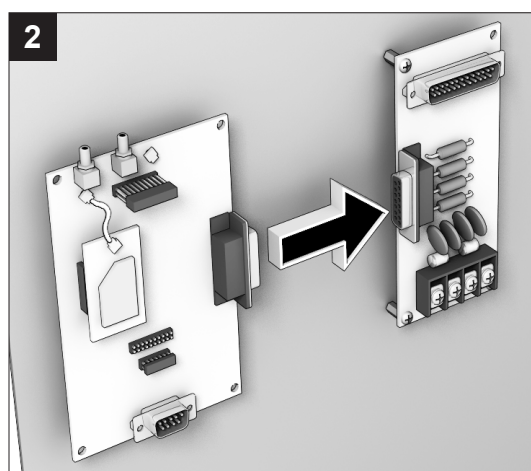
CAUTION: DXi serviceable parts shall be installed by qualified personnel familiar with the product and with local electrical code requirements. DXi serviceable parts shall not be used or installed in product other than DXi Product Series. Failure to do so will void product's safety and FCC certification. 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.



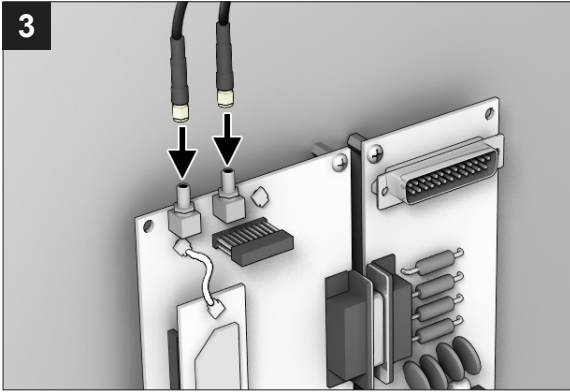
CAUTION: Power off the controller prior to installing expansion kits.



Remove screws and cover.

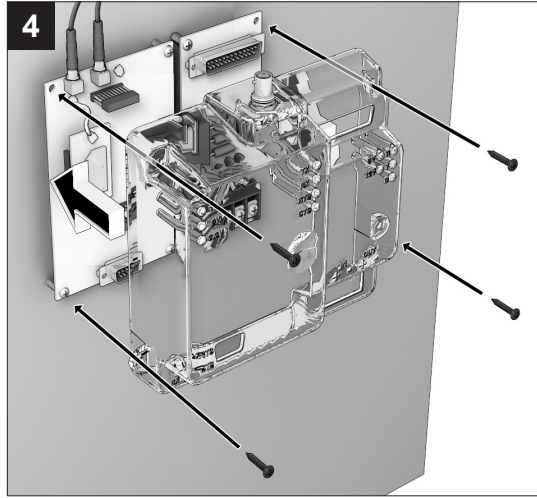


Connect WiFi COM board to hardwire COM board.



3

The WiFi antenna has two identical connectors, both of which need to be connected. The first connector connects the wifi antenna to the SMA connector on the docking COM board. The second connector is not used but is recommended to still connect to secure the extra antenna cable.



4

Reattach the cover and secure with screws.



WiFi uses unlicensed spectrum in the 2.4GHz band. The network ID has to be entered into the controller faceplate under SETUP menu of the WiFi network. A password for the network would also be required. It is not advised to use a WiFi network without a password or a default unsecure password. Once the network is configured, the internet connection is established and a "CLOUD ID" is displayed on controller faceplate.

Antenna Installation

To install the DXi wifi antenna:

- 1** Insert antenna wires and threading through the hole (Figure 8).
- 2** Connect wire connectors to connectors in step 3 page 1.



For plastic pedestal, the wifi antenna is installed into a cutout in the lid (Figure 9).



Setup WiFi Network using a USB Drive

As a convenience feature, it is possible to setup certain WiFi network parameters using a properly configured USB drive. This eliminates the need to enter the network parameter information using the controller's keypad.

The commands are entered by typing them into a text file which will be saved to the USB drive.

There are three relevant parameters set by commands as shown:

SSID – the network name

To set the SSID, enter the command “wifssid ssid name” (without quotes).

To blank the value, enter the command “wifssid /b”.

Example: If your SSID is “toroguest”, the command to type is “wifssid toroguest” (without quotes).

Password – the network password

To set the WiFi network password, enter the command “wifpassword password” (without quotes).

To blank the value, enter the command “wifssid /b”.

Example: If your password is “bob1234”, the command to

type is “wifpassword bob1234” (without quotes).

Encryption Type - 0=none, 1=WPA, 2=WPA2, 3=WEP

To set the encryption type, enter the command “wifencryption type” (without quotes).

Example: If no encryption is used, the command to type is “wifencryption 0” (without quotes).

Steps:

1. Create a text file called **insert.bat**.
2. Edit the file to contain the 3 commands, each on its own line of the file. For the examples above, the file would contain the following 3 lines:


```
wifssid toroguest
wifpassword bob1234
wifencryption 0
```
3. Save the insert.bat file to the root of your thumb drive.
4. Insert the USB drive into the controller. The commands will be executed.
5. Verify the settings using the controller's UI.

FCC & IC Label

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

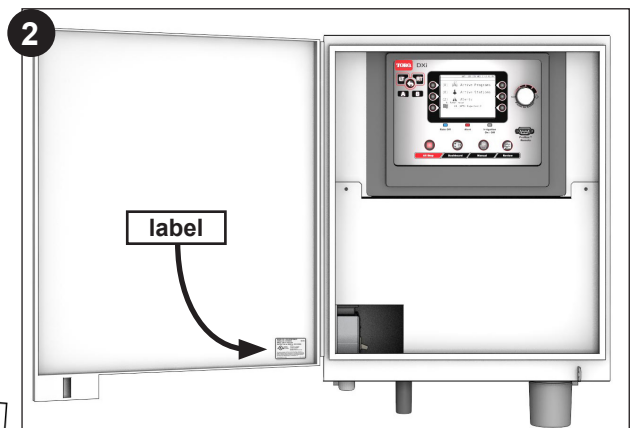
Each DXi controller ships with a label showing important information such as Model number, Serial number, UL certification, and more **1**.

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 wifi 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**.



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

FCC / IC Statement

This product contains a modular approval with FCC ID MCQ-XBS6B and IC 1846A-XBS6B.

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.

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 general 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 présent 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.



5825 Jasmine Street
Riverside, CA 92504
800-777-1477
irrigationsupport@toro.com



WARNING: Cancer and Reproductive harm – www.P65Warnings.ca.gov.
For more information, please visit www.toro.com/CAProp65.