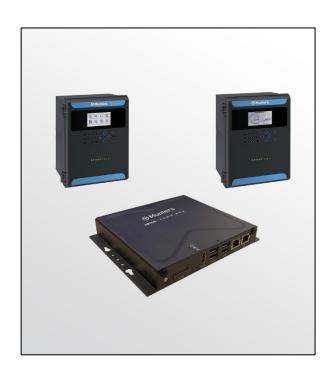
Installation and User Manual

CommBox for GreenField App



CommBox for GreenField App

Internet Access to Controllers



CommBox for GreenField App

Installation and User Manual

Rev 1.8, 12/2023

Software Ver: 4.6.0.35

This manual for use and maintenance is an integral part of the apparatus together with the attached technical documentation.

This document is destined for the user of the apparatus: it may not be reproduced in whole or in part, committed to computer memory as a file or delivered to third parties without the prior authorization of the assembler of the system.

Munters reserves the right to effect modifications to the apparatus in accordance with technical and legal developments.

Index

cha	oter		page		
1	INT	INTRODUCTION5			
	1.1	Disclaimer	5		
	1.2	Introduction	5		
	1.3	Notes	5		
2	INT	RODUCTION TO THE COMMBOX	6		
	2.1	Junction Box	6		
	2.2	What Comes in the Package	6		
	2.3	Supported Devices	6		
3	HAF	RDWARE INSTALLATION	7		
	3.1	CommBox Ports	7		
	3.2	Mounting the CommBox	8		
	3.3	Grounding	8		
	3.4	Connecting the CommBox to the Internet	9		
	3.5	Connecting the CommBox to Peripheral Devices	9		
	3.6	Connecting the CommBox to a Controller	10		
		3.6.1 Controller to Junction Box Wiring	10		
		3.6.2 RLINK One to Junction Box Wiring	12		
		3.6.3 CommBox to Junction Box Wiring	13		
		3.6.4 Wiring Topology	16		
		3.6.5 Termination	17		
		3.6.5.1 Termination Topologies	17		
		3.6.5.2 Termination Wiring	17		
4	TEC	CHNICAL DATA	18		
	4.1	CommBox	18		
	4.2	Junction Box	19		
5	GRC	OUP MANAGEMENT	20		
	5.1	What is a Group	20		
	5.2	Activating the Farm	21		
	5.3	Invite Users	26		
		5.3.1 Sending an Invitation	26		
		5.3.2 Defining User Privileges			
	5.4	Local Log In	28		
6	ROT	TEMNET WEB.	29		

	6.1	1 Sign In			29
		6.1.1	Star	ndard Login	29
		6.1.2	Priv	ate Server	30
	6.2	My Farm	n Grou	ups	31
		6.2.1	Deta	ails (Optional)	31
		6.2.2	Use	rs	32
		6.2	2.2.1	Existing Users	32
		6.2	2.2.2	New Users	32
		6.2.3	Farr	ns	34
		6.2.4	Mar	nage Groups	34
		6.2.5	Use	r Settings	35
	6.3	RotemN	et Fa	rm Management	36
		6.3.1	Das	hboard	36
		6.3.2	Rote	emNet Screen Appearance	37
	6.4	RotemN	et W	eb Functionality	38
		6.4.1	Farr	n Settings Tab	38
		6.4	1.1.1	Farm Settings	39
		6.4	1.1.2	External Devices	40
		6.4	1.1.3	Push Notifications	40
		6.4	1.1.4	Local Users	40
		6.4	1.1.5	Data Collect	41
		6.4	1.1.6	Activity Log	41
		6.4.2		se Scan Tab	
		6.4.3	_	gnostics Tab	
	6.5			grade	
	6.6	About T	ab		46
APPENDIX A: GENERATING AN ACTIVITY LOG				47	
APPENDIX B: DATA COLLECTION				49	
	8.1	Centrali	zed C	ollection	49
8.2 Defining the FTP/SFTP server			51		
	WAI	WARRANTY			

1 Introduction

1.1 Disclaimer

Munters reserves the right to make alterations to specifications, quantities, dimensions etc. for production or other reasons, subsequent to publication. The information contained herein has been prepared by qualified experts within Munters. While we believe the information is accurate and complete, we make no warranty or representation for any particular purposes. The information is offered in good faith and with the understanding that any use of the units or accessories in breach of the directions and warnings in this document is at the sole discretion and risk of the user.

1.2 Introduction

Congratulations on your excellent choice of using the CommBox Communication Device!

In order to realize the full benefit from this product it is important that it is installed, commissioned and operated correctly. Before installation or using the device, this manual should be studied carefully. It is also recommended that it is kept safely for future reference. The manual is intended as a reference for installation, commissioning and day-to-day operation of the Munters equipment.

1.3 Notes

Date of release: July 2019

Munters cannot guarantee to inform users about the changes or to distribute new manuals to them.

All rights reserved. No part of this manual may be reproduced in any manner whatsoever without the expressed written permission of Munters. The contents of this manual are subject to change without notice.

2 Introduction to the CommBox

NOTE This manual details how to set up and run the CommBox. The controllers' software programs are documented in separate manuals.

CommBox provides complete access to your Munters irrigation controllers, including monitoring and control capabilities (GreenField App), from any device, anywhere. From one computer, tablet, or smartphone, you can manage an entire network.

- Cloud-based access to controllers
 - o Multiple, simultaneous users have network access
- Multiple communication pathways
 - o Built-in internet and telephone connectivity
 - Cellular connectivity option
 - 960-13-10001: COMMBOX-GRH-EN-MUR-JB485-WEB (no modem)
 - 960-13-10029:COMMBOX-GRH-EN-MUR-CMGB-JB485-WEB (includes global modem)
- Local communication via wired or wireless communication
- Status reports provide critical information on irrigation functions and statistics
- Push notifications

2.1 Junction Box

Connecting a CommBox directly to a controller requires a Junction Box. Refer to Connecting the CommBox to a Controller, page 10.

P/N: 960-99-00091 COMMBOX-JUNCTION BOX RS485 (COMMBOX-JB-485)

2.2 What Comes in the Package

- CommBox
- Junction Box
- Power Supply Cables 115VAC and 230VAC

2.3 Supported Devices

- The following product versions support the Greenfield App application:
 - Greenfield Version 3.08.05 and above.
 - o Greenfield Eco Version 9.08.05 and above.

NOTE Before upgrading the Greenfield from Version 3.07.XX to 3.08.XX the first time, copy (photograph) the settings of the controllers' tables. These tables can't be uploaded from a data plug; they must be entered manually.

3 Hardware Installation

This document details how to install Munters' CommBox unit. Installation consists of:

- CommBox Ports
- Mounting the CommBox
- Grounding
- Connecting the CommBox to the Internet
- Connecting the CommBox to Peripheral Devices
- Connecting the CommBox to a Controller

NOTE No software installation is required.

3.1 CommBox Ports

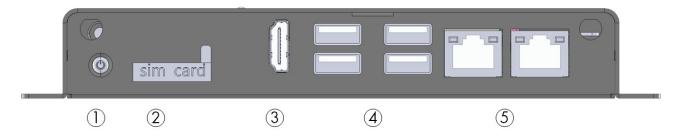


Figure 1: Front View

Number	Description
1	On/off button
2	SIM Card port (4G card can be used with a modem for cellular connectivity)
3	HDMI port (refer to Connecting the CommBox to Peripheral Devices)
4	USB ports(refer to Connecting the CommBox to Peripheral Devices)
5	Internet ports (refer to Connecting the CommBox to the Internet)

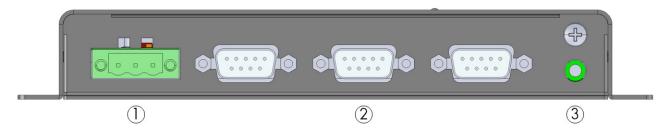


Figure 2: Rear View

Number	Description	
1 & 2	External box cable connectors	
3 Audio out		

3.2 Mounting the CommBox

• Using the screws provided, mount the unit.

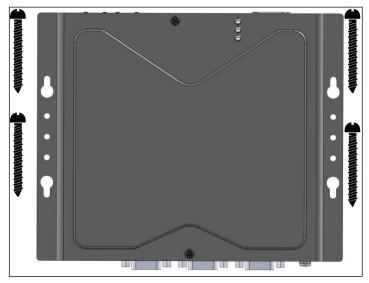


Figure 3: Unit and Mounting Screws

3.3 Grounding

• Connect the ground cable to the dedicated ground terminal.

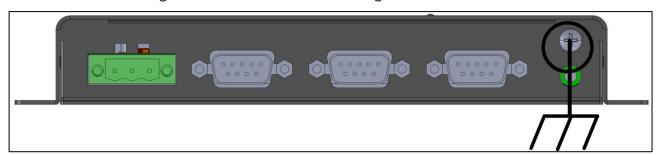


Figure 4: Grounding Schematic

CAUTION The CommBox must be grounded at all times!

3.4 Connecting the CommBox to the Internet

• Connect the CommBox to your Internet connection/modem.

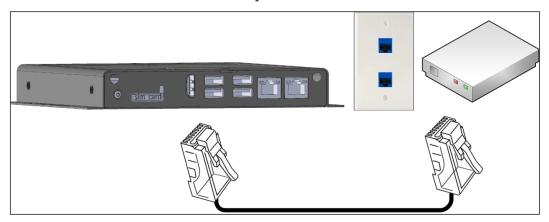


Figure 5: Internet Connection

3.5 Connecting the CommBox to Peripheral Devices

When required, connect a screen, keyboard, or mouse to the CommBox (via the USB/HDMI ports).

NOTE Connect the screen to the CommBox using an HDMI cable only. Do not use any other type of cable connected to an HDMI adapter.



Figure 6: Peripheral Devices

3.6 Connecting the CommBox to a Controller

The only step in installing a CommBox that requires wiring is if the CommBox is connected directly to a controller (instead of to a communication unit). In this situation the CommBox must be wired to the controller communication card via a Junction Box.

- Controller to Junction Box Wiring
- RLINK One to Junction Box Wiring
- CommBox to Junction Box Wiring
- Wiring Topology
- Termination

WARNING! Disconnect the power before beginning!

WARNING! Only an authorized electrical technician may perform this procedure!

3.6.1 CONTROLLER TO JUNCTION BOX WIRING

In the controller, connect the CommBox to the controller's communication card, via the Junction Box. Refer to the following illustrations.

NOTE GreenField irrigation installation supports RS-485 wiring only.

- 1. The cable between the controller and the Junction Box should be a 3-wire twisted shielded cable (22 or 24 AWG).
- 2. Connect the wiring as follows:
 - COM to COM
 - o CommBox A port is connected to Controller's A port.
 - The CommBox B port is connected to Controller's B port.
- 3. The final controller in any chain or branch requires a 120-ohm terminator.
- 4. Connect the cable shield wire to the controller ground strip.

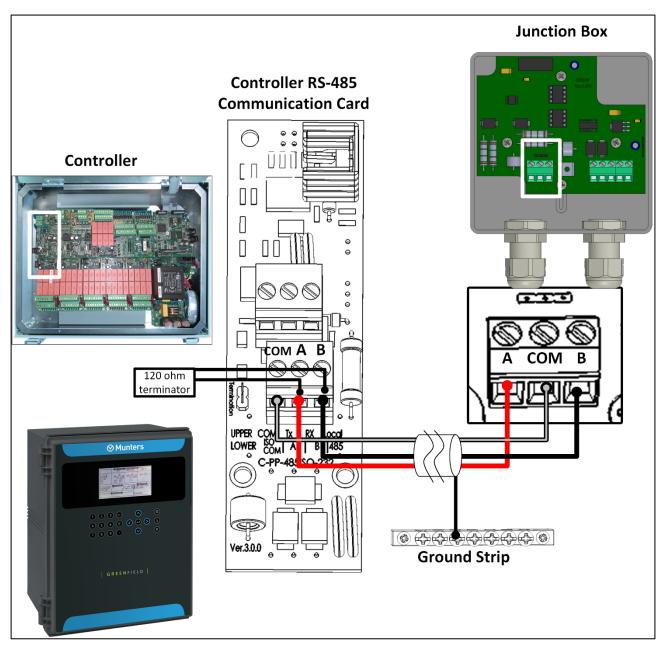


Figure 7: Green Field RS-485 Wiring

CAUTION Connect one end of the cable's shield only (the other end must be open).

Each controller should be chain connected to the same wire, resulting in a long ground cable without a ground loop.

3.6.2 RLINK ONE TO JUNCTION BOX WIRING

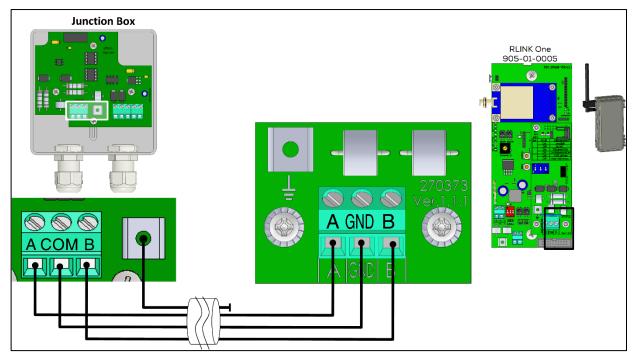


Figure 8: RLINK One RS-485 Wiring

- 1. The cable between the external connection box and the RLINK One should be a 3-wire twisted shielded cable (22 or 24 AWG).
- 2. Connect the wiring as follows:
 - o COM to COM
 - o CommBox A port is connected to Controller's A port.
 - The CommBox B port is connected to Controller's B port.
- 3. The final controller in any chain or branch requires a 120-ohm terminator. Refer to Termination, page 17.
- 4. Connect the cable shield wire to the controller ground strip.

3.6.3 COMMBOX TO JUNCTION BOX WIRING

• The CommBox comes with the power supply wired to the unit. See Figure 9.

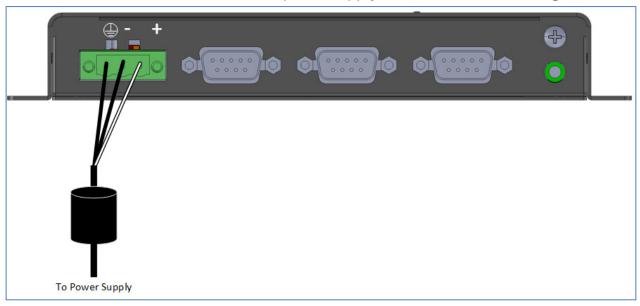


Figure 9: CommBox Power Supply Wiring

1. Insert the Junction Box 9-Pin Connector into COM1 (see Figure 10).

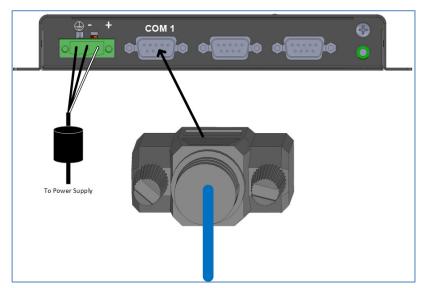


Figure 10: Insert 9 Pin Connector

2. Insert the two wires coming from the Junction Box cable into the ports (see Figure 11 and Figure 12).

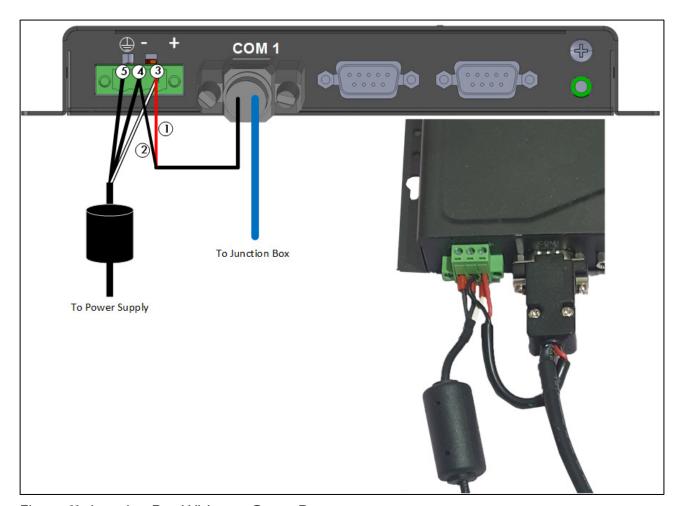


Figure 11: Junction Box Wiring to CommBox

Table 1: Wiring Details

Cable source	Color	Function	Number
Junction Box Cable	Red	+VCC (24 DC)	1
	Black	-VCC (Junction Box)	2
Power Supply Cable*	White	+VCC (Junction Box) (24 DC)	3
	Black	-VCC	4
	Black	Ground	5

^{*}These wires come preconnected to the CommBox. If they need to be reattached, place the white cable (#3) in the port as shown in Figure 4. Place both black cables into the ports as shown in Figure 4; either cable can be placed in either port.

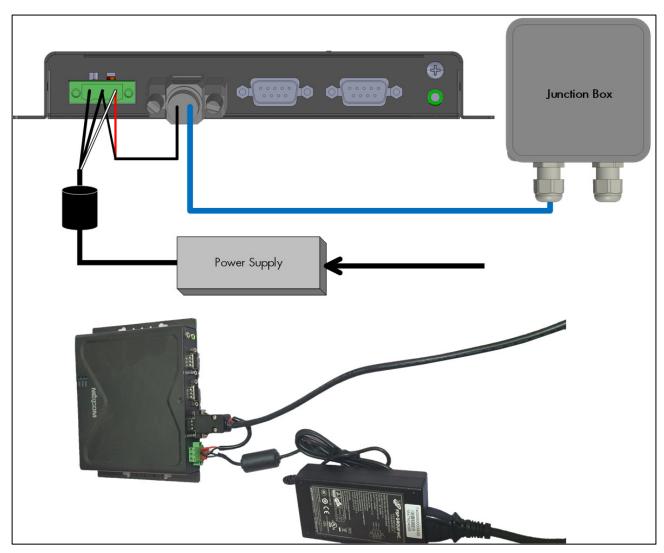


Figure 12: Power Supply – CommBox – Junction Box Setup

3.6.4 WIRING TOPOLOGY

When connecting the CommBox to controllers via an RS-485 infrastructure, use one of the following allowed topologies to ensure signal integrity.

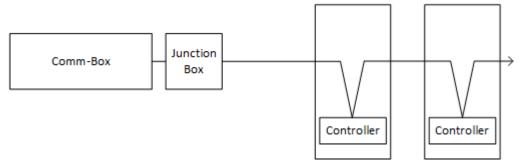


Figure 13: Direct connections

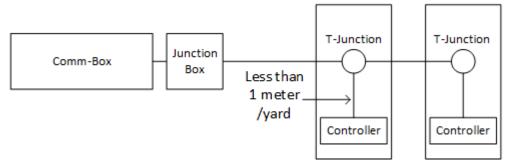


Figure 14: T-Junction (permitted)

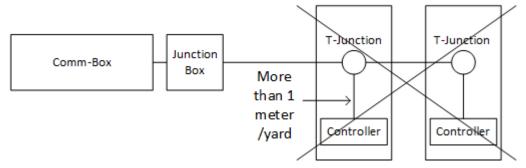


Figure 15: T-Junction (not permitted)

3.6.5 TERMINATION

Termination, installing 120-ohm termination resistors at the beginning and end units of each chain of CommBox and controllers, ensures reliable communication in RS-485 infrastructures. The following illustrations show where to install the resistors. Depending on the topology, install the resistors in the T-box, the terminal controller, or the Munters Repeater.

Termination is recommended when the distance between the Junction Box and the final controller is more than 50 meters/165 feet. Munters Junction Box is supplied with a jumper and a 120 ohm resistor that can be installed in those installations (the jumper is placed in the Junction Box (see Figure 18, page 17), the resistor is installed in the controller). Termination may not be required in shorter installations.

- Termination Topologies
- Termination Wiring

3.6.5.1 Termination Topologies

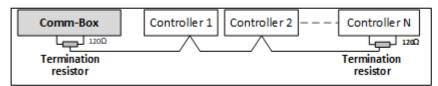


Figure 16: Topology 1: CommBox/Controller Termination

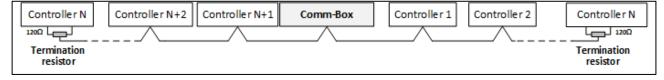


Figure 17: Topology 2: Controller Termination

3.6.5.2 Termination Wiring

• CommBox: Install the termination resistor in the Junction Box.

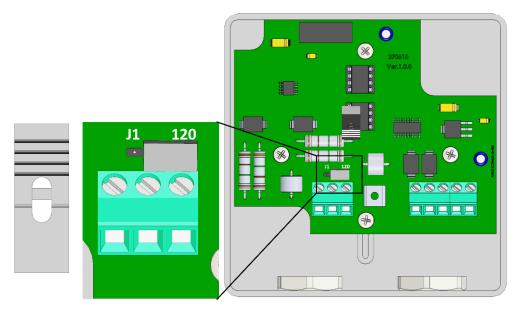


Figure 18: Junction Termination

4 Technical Data

4.1 CommBox

Power Supply			
Power Input	• 24V DC +/-20%		
	• 1 x 24V, 60W power adapter		
CAUTION Unit shuld be powered by Limited Energy Source per IEC 61010-1 or Limited Power Source per IEC 60950-1 or IEC 62368-1			
Temperature Range			
Operating Temperature Range	0° to +50° C / 32° to 125° F		
Storage Temperature Range	-10° to +70° C / 14° to 158° F		
Environmental Specifications			
Indoor use only			
 Altitude: -400 m to 2000 m 			
Relative Humidity: 0 – 95%			
 Main supply voltage fluctuation up to 5% 			
Overvoltage category: OVCII			
Pollution degree: PD2			
Ingress Protection: IPXO			
Housing			

Metal Box Dimensions (W x H x D) $162 \times 26 \times 150 \text{ mm}$ (without wall-mount bracket)

SIM Card Requirements

Celphone SIM Card4GCell Package10 GB minimum

Certification









4.2 Junction Box

Power Supply				
Junction Box Power Input	24 VDC, 30 mA			
CAUTION Unit shuld be powered by Limited Energy Source per IEC 61010-1 or Limited Power Source per IEC 60950-1 or IEC 62368-1				
Temperature Range				
Operating Temperature Range	0° to +45° C / 32° to 113° F			
Storage Temperature Range	-10° to +70° C / 14° to 158° F			
Environmental Specifications				

- Indoor use only
- Altitude: -400 m to 2000 m
- Relative Humidity: 0 90%
- Main supply voltage fluctuation up to 5%
- Overvoltage category: OVCII
- Pollution degree: PD2
- Ingress Protection: IP50

5 Group Management

When using the CommBox to connect to your farm(s), you must:

- create (activate) a farm
- invites users

5.1 What is a Group

A group is the virtual device used to manage your farms. Using the RotemNet Web application, the group manager defines each user's permissions (which farms he can see and what functions he can carry out).

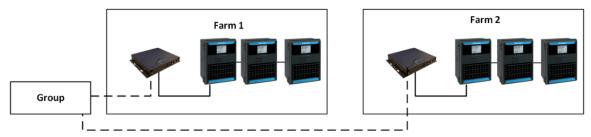


Figure 19: Group Example

As an example, an account manager has sent up two Groups and wants to add three different users to his account (Figure 20).

- 1. User 1 is assigned access rights to Farm 1.
- 2. User 2 is assigned access rights to Farm 2.
- 3. User 3 is assigned access rights to Farm 1 and Farm 2.
- 4. In addition, User 1 is also assigned access rights to Farm 3, which is in an entirely different group.

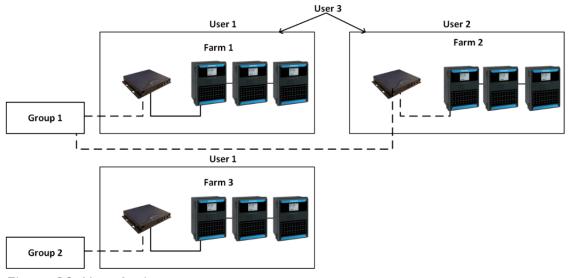


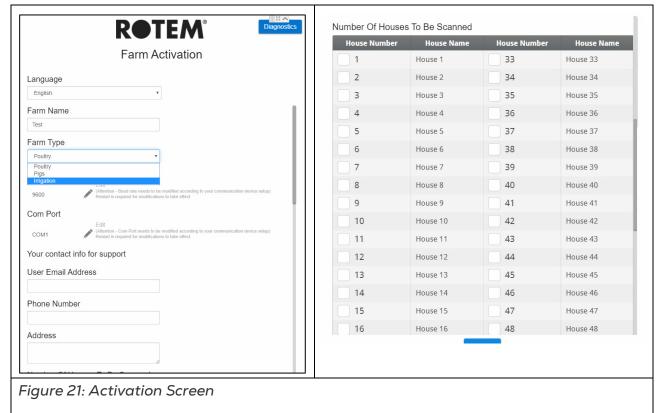
Figure 20: User Assignment

Any combination is possible.

5.2 Activating the Farm

The first time that you power up a CommBox, you need to activate a farm.

1. Connect the CommBox to a screen, keyboard, and mouse. Apply power. The Farm Activation screen appears.



- 2. Fill in the fields:
 - O Name: Type in the farm name.
 - o Farm Type: Choose the type from the drop-down list.
 - Baud rate/Com Port: CommBox has a default setting of 9600 BPS, respectively. If you need to change this setting, click on the pencil and choose a setting from the drop-down list.
 - Verify that the CommBox and controller baud rates are the same.
 - The Com Port must be Com Port 1.
 - Contact info: This is optional information which enables Munters to contact you if needed.

NOTE You can edit these settings in RotemNet Web.

- Mark the checkboxes of the houses to be scanned. Mark at least one house.
 As an option, the house names can be edited.
- 3. Click Activate. A pop up appears asking if you want to scan your farm houses.

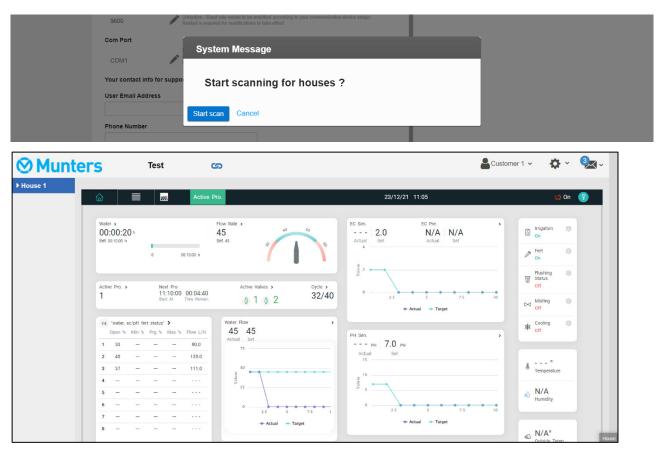


Figure 22: Green Field Dashboard

4. Click the settings icon () and go to farm settings. The following screen appears.

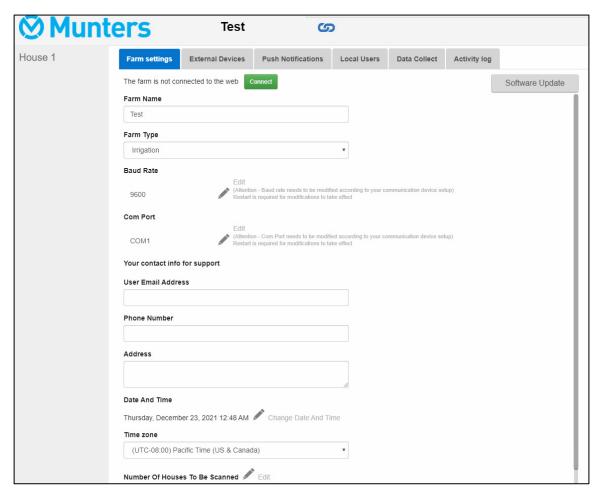


Figure 23: Initial Farm Settings Screen

5. Click Connect. The following screen appears.

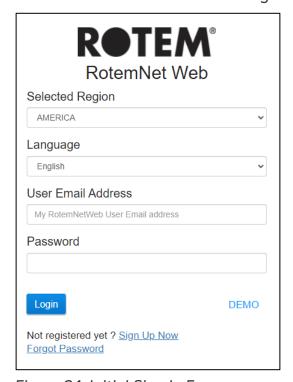


Figure 24: Initial Sign In Form

6. From the drop down lists, select the region and language.

CAUTION If you are using the Irrigation application, select America only.

7. Click Sign Up Now. The following screen appears.

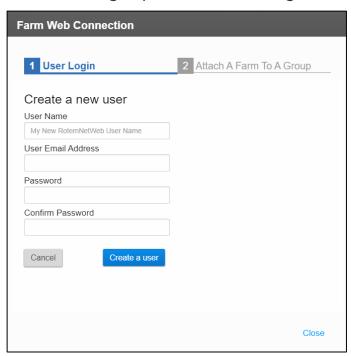


Figure 25: Create a New User Screen

8. Fill in all fields and click Create a User.



Figure 26: Create a User (Example)

9. Click Attach a Farm to A Group. The following screen appears:



Figure 27: Group Screen (1)

10. Write the name of the farm group that you want to create and click **Attach to Group**.

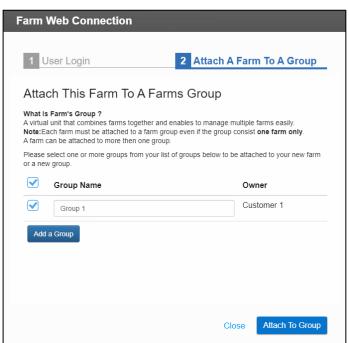


Figure 28: Farm Attached to Group

NOTE To create new groups, click Add a Group.

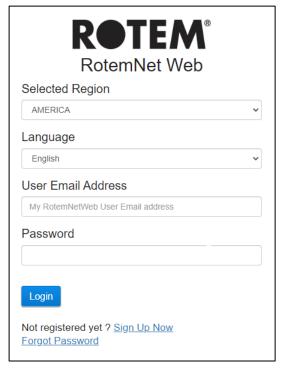
5.3 Invite Users

The following section details how to invite news users and define the user privileges.

- Sending an Invitation
- Defining User Privileges

5.3.1 SENDING AN INVITATION

- 1. The person to be invited must be registered in the system.
 - o If the user has signed up to rotemnetweb.com, proceed to Step 2.
 - a. If the invitee is not registered in the system, go to https://rotemnetweb.com/.



- b. Click Sign Up Now.
- c. Fill out the fields and click Sign Up.
- d. Proceed to Step 2.
- 2. Disconnect the computer screen from the CommBox and reconnect it to a computer (alternatively use a different computer).
- 3. Sign in (using the email address and password that you used during activation) to the CommBox via the web at https://www.rotemnetweb.com/.

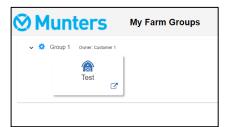


Figure 29: My Farm Groups

4. Click the gear icon . The following screen appears listing the active users.



Figure 30: Active Users Screen

5. Click Invited.



Figure 31: Add a New User Screen

6. Click Add.

- a. Fill out the fields.
- b. Define the user privileges (see below for details).
- c. Click Invite. The invitee receives the following email:

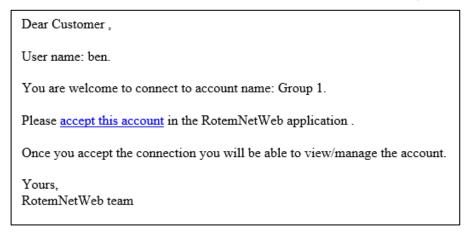


Figure 32: Email Invitation (Example)

5.3.2 DEFINING USER PRIVILEGES

Defining the privileges defines what functions the user can perform in both the CommBox and in the GreenApp.

• CommBox User Rights:

- Admin: User can edit all unit parameters including functions related to farm settings and farm ownership.
- Read/Write: User can edit all unit parameters but cannot perform any functions related to farm settings. (Farm Settings do not appear for users having Read/Write access).

- Read Only: User can only view the CommBox units' parameters; no changes can be made.
- Unauthorized: TBD. (Currently used as read only)
- Support: TBD. (Currently used as read only)

• Web App User Rights:

- Farm Owner/Admin: User can edit all unit parameters including functions related to farm settings (including attaching a farm to a group) and inviting new users.
- Read/Write: User can edit all unit parameters but cannot perform any functions related to farm settings (not visible).
- Read Only: User can only view the units' parameters; no changes can be made.
- Unauthorized: TBD. (Currently used as read only)
- Support: TBD. (Currently used as read only)

5.4 Local Log In

In the event that:

- You restart your system
- CommBox logs off (this can happen automatically if you are not using system)
- Power goes off

you need to log on to the CommBox locally. The username and password of this login are different from the ones used when logging on to the Web.



Figure 33: Local Log In

- Enter the user name and password. The defaults are:
 - User name: "Farm Owner"
 - Password: "admin"

NOTE The user name cannot be changed. You can change the password after logging in. NOTE After logging in locally, you will need to log in to the Web.

6 RotemNet Web

The following sections describe how to use the RotemNet Web functions. Controller functions are described in the product manuals.

- Sign In
- My Farm Groups
- RotemNet Farm Management
- RotemNet Web Functionality
- Software Upgrade
- About Tab

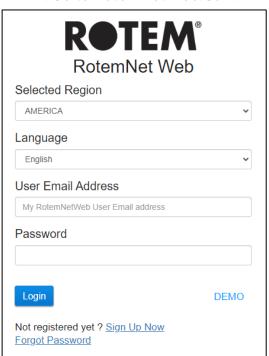
6.1 Sign In

There are two ways to sign in:

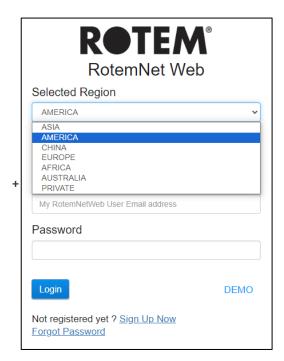
- Standard Login
- Private Server

6.1.1 STANDARD LOGIN

1. Go to RotemNetWeb.Com.



2. From the drop-down list, select the region closest to you. Proper selection is required to ensure faster response time.



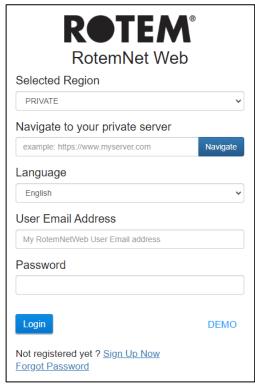
3. Enter the email address and password, and click Login.

After signing in, the My Farm Groups screen appears:

6.1.2 PRIVATE SERVER

If your farm is connected to a private server system:

1. Click Private from the Selected Region. The following screen appears.



2. Enter the server information.

NOTE Dealers provide this information, if relevant.

• After signing in, the My Farm Groups screen appears:

6.2 My Farm Groups

Click the My Farm Groups to access all groups to which you are participating in, in any capacity. The screen shows the groups and their status (on-line/off-line).



- Click any icon to go to the group's farms (refer to RotemNet Farm Management, page 36).
- Click the settings icon 🛟 to view and manage the group's users and farms.
- You can reach this screen from the dropdown menu:

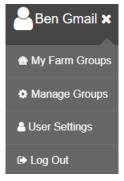


Figure 34: User Group Access

6.2.1 DETAILS (OPTIONAL)

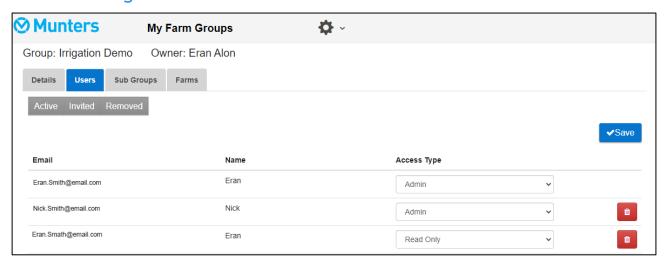
Fill in details about the group as required.



6.2.2 USERS

Click the Users tab to manage all group users.

6.2.2.1 Existing Users



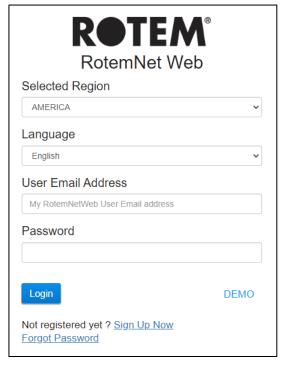
• On this screen, delete users or change the permissions of existing users.

6.2.2.2 New Users

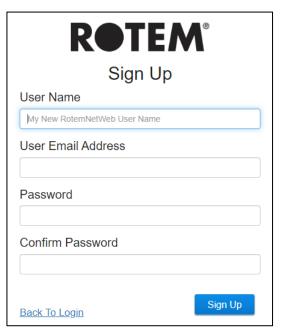
New users who are not part of the system must first sign up before being invited. If the user has an existing email address in the RotemNet Web system, go to Inviting the New User.

6.2.2.2.1 Creating a New User

1. Have the user go to rotemnetweb.com.



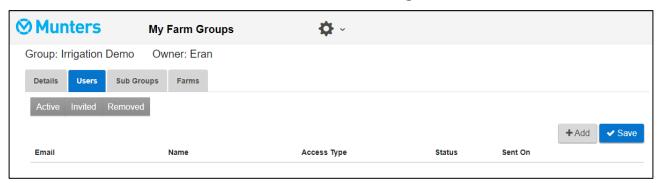
2. Click Sign Up Now.



3. Fill in the fields and click Sign Up.

6.2.2.2.2 Inviting the New User

Once the user has created an account, the administrator goes to the User screen.

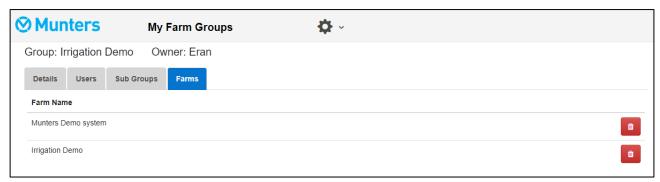


- 1. Click Add.
- 2. In the Email field, enter the new user's email address. This address must be registered. See the following sections for details on creating a user.
- 3. Define the Access Type (permissions).
- 4. Click Invite.

The user will receive an email asking him/her to accept the invitation.

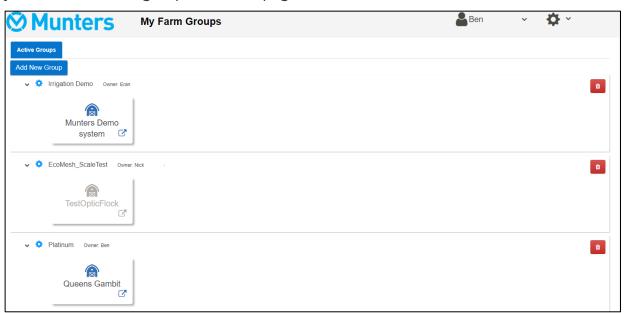
6.2.3 FARMS

The Farms screen lists the farms in this group.



6.2.4 MANAGE GROUPS

Manage Groups enables many of the same functions as the My Groups screen. In addition, you can create new groups from this page.



1. To create a new group, click Add New Group. Fill in the fields. A

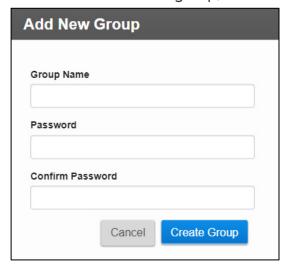
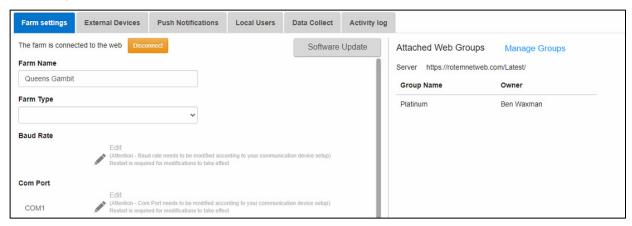


Figure 35: Add New Group screen

2. After creating the group, add farms to the group. Go to the Farm Settings screen. NOTE Only a farm owner/administrator connected to a farm locally can attach the farm to a group.



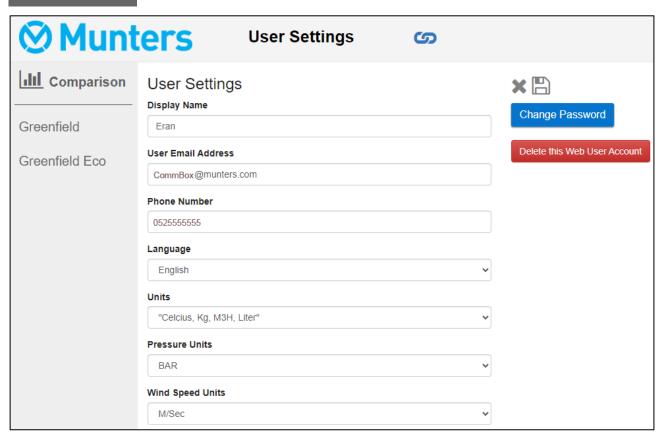
3. Click Manage Groups and attach the farm to a group.

6.2.5 USER SETTINGS

This screen defines how information appears on the screen. In Farm Owner, select

User Settings

. The following screen appears.



- To edit, click . Fill in the following fields as required.
 - o Display name: Name that appears on the User Setting screen.
 - User email address
 - Phone number

- Language: Chose from the drop-down list
- Unit types: Metric or English
- o Temp Units: Celsius or Fahrenheit
- Pressure Units
- Wind Speed Units
- Disable or enable standby by mode (if the latter, define the amount of time that needs to pass before the mode is activated).
- Click to save any changes.

6.3 RotemNet Farm Management

- Dashboard
- RotemNet Screen Appearance

6.3.1 DASHBOARD

After signing in, an initial screen appears. The screen that appears depends on the controllers connected to the CommBox.

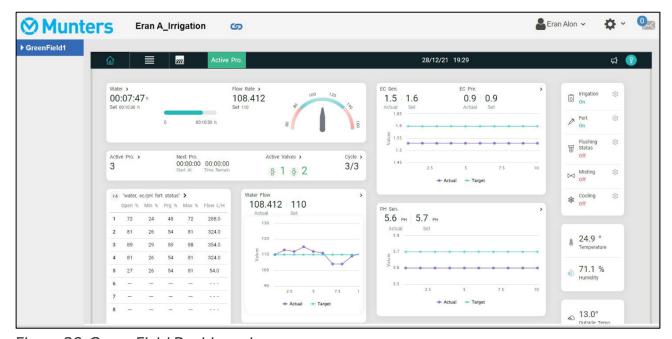
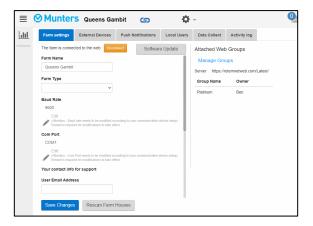


Figure 36: Green Field Dashboard

- Click on House to go to that controller functionality.
- Click on to configure RotemNet Web functionality.
- Click on to configure the user definitions.

6.3.2 ROTEMNET SCREEN APPEARANCE

The screen appearance depends on how the user connects to the CommBox, as a local user or via the internet. Users connected locally have access to additional functionality.



Comparison

Mill Comparison

Fram None

Come or Grad

Fam None

Come or Grad

Figure 37: Local Connection

Figure 38: Web Connection

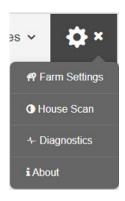


Figure 39: Local Connection Settings

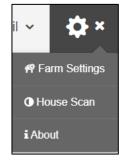


Figure 40: Web Connection Settings (administrator)

In addition, when connected via the web, the user has easy access to his/her groups (Refer to My Farm Groups, page 31).

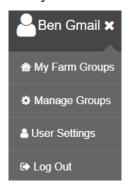
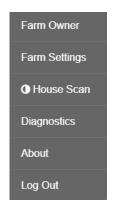


Figure 41: User Group Access

6.4 RotemNet Web Functionality

The following section describes the RotemNet Web functions.



- Farm Settings Tab
- House Scan Tab
- Diagnostics Tab
- About Tab

NOTE Only the farm owner can view the Farm Owner, Farm Settings, and House Scan tabs.

6.4.1 FARM SETTINGS TAB

- Farm Settings
- External Devices
- Push Notifications
- Local Users
- Data Collect
- Activity Log

NOTE The "Push Notifications" and "Local Users" tabs appear only on a computer screen connected directly to the CommBox.

6.4.1.1 Farm Settings

Use this screen to define functions related to CommBox's connection to your farm.

This function appears both for local and web access connections.

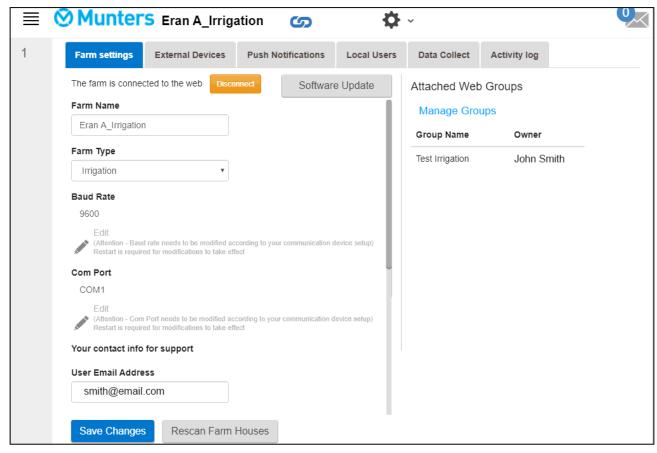


Figure 42: Farm Settings Screen

- Farm Name: This is the name that appears on your screen.
- Connect/Disconnect: This function enables disconnect from the current farm from the internet and reconnecting it via the Log-in screen).

NOTE This function only appears on screens locally connected to the CommBox.

- Farm Type: Poultry Pigs, or Irrigation. Make sure that the definition matches the CommBox type!
- Baud rate: This rate must be the same throughout the network.
- Com Port
- Contact information (optional): This information will be used by Munters to contact users if there is a need; for example to inform you of an update. The information will not be distributed to any outside parties whatsoever.
- Date and Time/Time Zone: Edit as required.
- Number of Houses to be Scanned: Scanning tests communication to the houses. If you wish to scan all houses or individual houses, click the relevant house number. Click Rescan farm houses to complete the scan.
 - o You can name the houses.
- Click Save Changes.

• System Update: Refer to Software Upgrade.

6.4.1.2 External Devices

Not applicable to irrigation systems.

6.4.1.3 Push Notifications

This function appears both for local and web access connections.

CommBox can send push notifications to multiple email addresses. These emails list:

- House/controller number
- Alarm time and date
- Alarm description

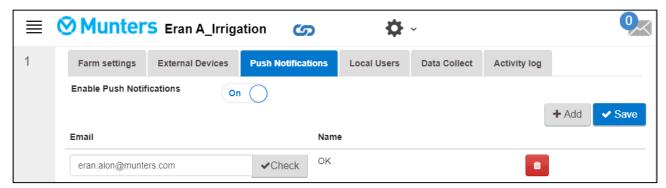


Figure 43: Push Notifications Screen

• Enter an address, click Check, Add, and then Save.

6.4.1.4 Local Users

NOTE This tab and screen only appear when connected directly to the CommBox (meaning not via the web).

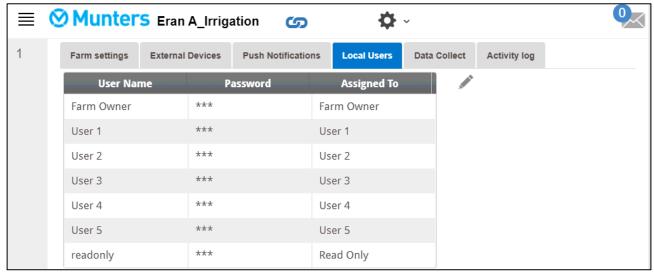


Figure 44: Password Definitions Screen

This screen lists pre-assigned user names and passwords.

- Each user name and password is the same. For example, User 1's password is User 1. User 2's password is User 2.
- The Farm Owner can edit these names, passwords, and to whom they are assigned.

6.4.1.5 Data Collect

Refer to Appendix B: Data Collection, page 49.

• This function appears both for local and web access connections.

6.4.1.6 Activity Log

This screen displays the history of events connected to the CommBox. Under Event, Sub Event, User, and Cmd ID you can select filters to narrow down the results.

• This function appears both for local and web access connections.

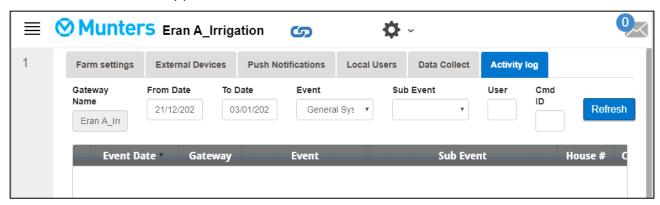


Figure 45: CommBox Events

Refer to Appendix A: Generating an Activity Log, page 47 for detailed information on this function.

6.4.1.6.1 General Settings

Refer to Appendix B: Data Collection, page 49.

• This function appears in web access connections only.

6.4.2 HOUSE SCAN TAB

The House Scan screen:

- Shows the results of the house scan.
- Show the controller type and software version used in each house.

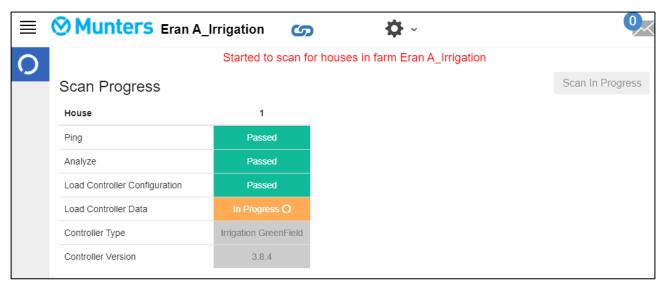


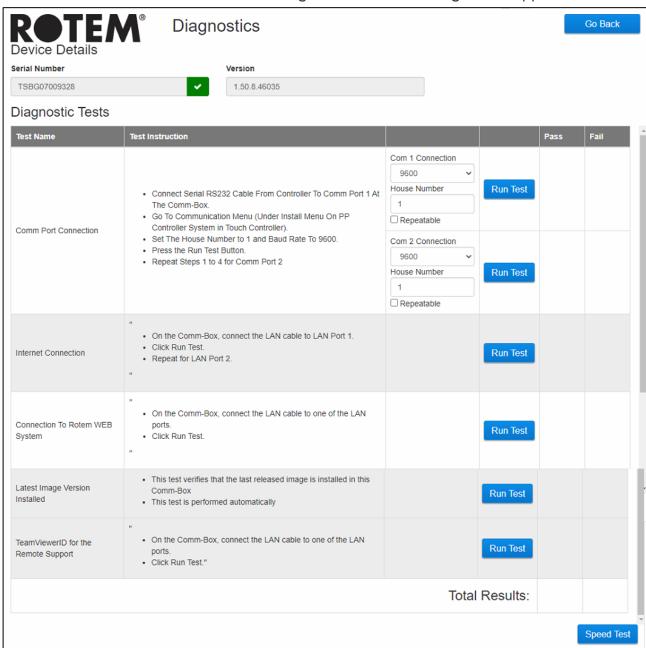
Figure 46: Scan Example

6.4.3 DIAGNOSTICS TAB

CommBox 4.6.0.35 includes a basic diagnostics package.

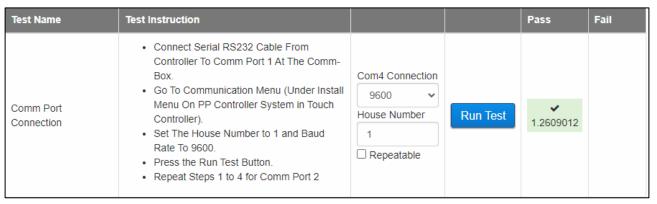


• On the Activation screen click Diagnostics. The following screen appears.

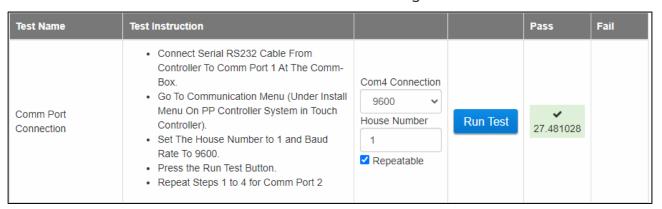


CAUTION When switching from Diagnostics mode to Normal mode, there could be a System Issue with closing communication port. If there is a service interruption, reboot the CommBox.

- Use this screen and the information it supplies when speaking with technical support.
- Diagnostic Tests enables the following tests:
 - Lan test
 - Internet tests
 - Support tests
 - COM Port test. This option can be used to test the communication between the CommBox and any house. Enter the number of the house to be tested. This test has two options:
 - Standard. This test shows the ping time between the CommBox and the selected controller. Either a number appears or there is a failure.



 Repeatable. This test enables verifying that the controller's communication card (RS232 or RS485) is sending and receiving signals. Click the Run Test icon and examine the controller communication card to ensure that its test LEDs are flashing.



Enables a speed test.

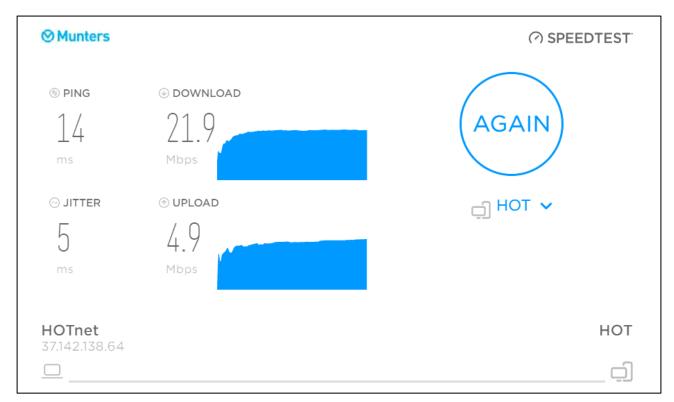


Figure 47: Speed Test

6.5 Software Upgrade

You can upgrade certain software programs from the Web application.

- GreenField App software
- Web application
- CommBox software

NOTE CommBox can be updated locally only; it cannot be updated remotely. The System Update button does not appear in remote connections.

NOTE You cannot upgrade product software! Upgrade your product software using the procedures given in the product manuals.

NOTE If you are using a disk on key start here. If you are updating your CommBox via the web, go to step 4.

- 1. Request the software upgrade from your dealer. You will be sent (via email, web transfer, etc.) a UPD file.
 - a. Place the file on a disk on key/flash drive.
 - b. Place the disk on key/flash drive into the CommBox' USB port.
- 2. In the web application, click the Farm Settings tab. The following screen appears.



Figure 48: Farm Settings System Update

3. Click System Update. The following screen appears:

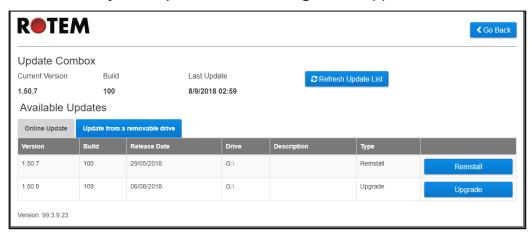


Figure 49: Update Software

- Users updating online: Click **Online Update** and choose the required software version.
- User updating using a flash drive: Click **Update from a removable drive** and choose the required software version.

NOTE If you did not place the disk on key in the USB port or if the disk does not contain a program, an error message appears.

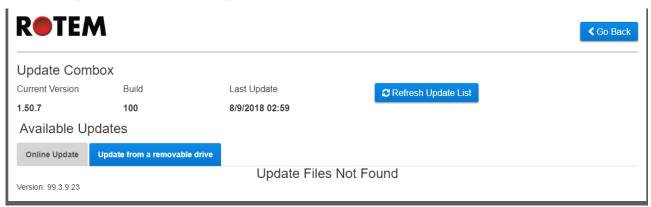


Figure 50: Error Message

6.6 About Tab

This screen displays the product and software version. Send this information to technical support in the even that you require assistance. The Support ID enables remote technical support from Munters or from your dealer.



Figure 51: Tech Support Screen

7 Appendix A: Generating an Activity Log

The following section details how to use the Activity Log, in particular how to determine who made changes to the controllers' settings. Please note:

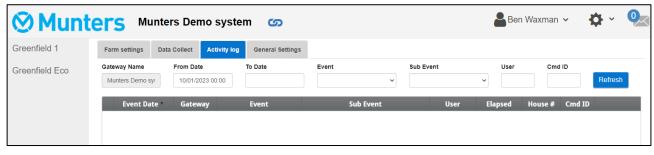
- These inquiries can only be made via the web. Local connections or connecting via TeamViewer do not support this function.
- Only changes made via the web are listed! Changes made locally by the farm owner or administrator are not listed.
- Only administrators can perform this function.
- 1. Connect to a farm via www.rotemnetweb.com.



2. Under the settings icon, click Farm Settings.

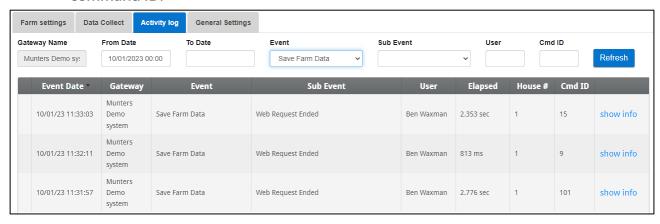


3. Click the Activity Log tab.



- 4. Define as needed:
- Gateway Name: (farm name that the user chose): Read only.
- From/To: Define the time frame.
- Event:

- o To see all events, leave this field empty.
- To see who made changes to the controller settings, choose Save Farm Data from the dropdown list.
- Sub Event: Select if required.
- User: If you are looking for a specific person's activities, type in the user name.
- Cmd ID: If you are looking for a specific change in controller settings, type in the command ID.



NOTE For information on the Command IDs, consult with technical support.

8 Appendix B: Data Collection

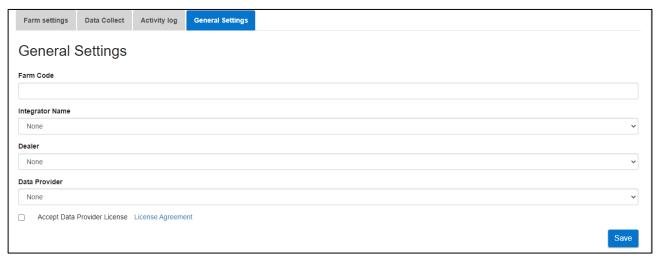
8.1 Centralized Collection

NOTE Only use the Centralized Collection function after consulting with Munters technical support.

- Only the group owner or administrator can define the General Settings. The following tab does appear on any other user's screen.
- The General Settings page is an option. If data upload is to a local server only, leave these fields blank and go to Defining the FTP/SFTP server.
- 1. In the settings icon, select Farm Settings.

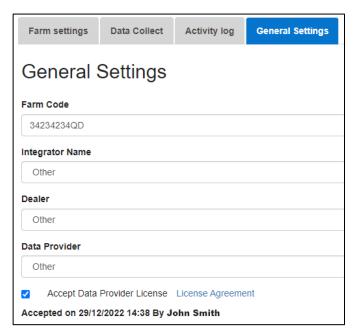


2. Go to Farm Settings > General Settings.



- 3. Enter the data as follows:
 - Farm Code: This is a code provided by the integrator used to identify the farm.
 - o Integrator Name: From the drop-down list, select the required name.
 - o Dealer: From the drop-down list, select the required dealer name.
 - o Data Provider: From the drop-down list, select the required data provider.
 - Accept Data Provider License. Mark this box. This box must be checked to enable centralized data collection.

NOTE This acceptance is saved.



4. Click the Data Collect Screen. Refer to the following section.

8.2 Defining the FTP/SFTP server

Use this function to enable data collection to your FTP/SFTP site.

NOTE Data Upload Allowed appears if the General Settings fields are filled out and Data Provider License accepted. If the fields are filled out but the license is NOT accepted data, upload is disabled.



- Data Upload Settings:
 - Check Allow to change settings to enable editing the page.
 - Select FTP or SFTP and check the box.
 - License key: This is a read-only field. The field is filled in automatically if you fill in the General Settings fields.
- FTP/SFTP Details: Fill in the fields as required.
- Collect Preferences:
 - Under Select Houses, select at least one house to enable changing Auto Collect settings.
 - o Check Alarm History, VFT, and Collect Alarms every 1 minute as required.

CAUTION Only mark the Alarm History, VFT, and Collect Alarms checkboxes if you are uploading data to a centralized collector. Anyone using a private FTP server must leave these boxes unchecked!

- o Select the output file format.
- o Define the collection interval.

9 Warranty

Warranty and technical assistance

Munters products are designed and built to provide reliable and satisfactory performance but cannot be guaranteed free of faults; although they are reliable products they can develop unforeseenable defects and the user must take this into account and arrange adequate emergency or alarm systems if failure to operate could cause damage to the articles for which the Munters plant was required: if this is not done, the user is fully responsible for the damage which they could suffer.

Munters extends this limited warranty to the first purchaser and guarantees its products to be free from defects originating in manufacture or materials for one year from the date of delivery, provided that suitable transport, storage, installation and maintenance terms are complied with. The warranty does not apply if the products have been repaired without express authorisation from Munters, or repaired in such a way that, in Munters' judgement, their performance and reliability have been impaired, or incorrectly installed, or subjected to improper use. The user accepts total responsibility for incorrect use of the products.

The warranty on products from outside suppliers fitted to is limited to the conditions stated by the supplier: all claims must be made in writing within eight days of the discovery of the defect and within 12 months of the delivery of the defective product. Munters has thirty days from the date of receipt in which to take action, and has the right to examine the product at the customer's premises or at its own plant (carriage cost to be borne by the customer).

Munters at its sole discretion has the option of replacing or repairing, free of charge, products which it considers defective, and will arrange for their despatch back to the customer carriage paid. In the case of faulty parts of small commercial value which are widely available (such as bolts, etc.) for urgent despatch, where the cost of carriage would exceed the value of the parts, Munters may authorise the customer exclusively to purchase the replacement parts locally; Munters will reimburse the value of the product at its cost price.

Munters will not be liable for costs incurred in demounting the defective part, or the time required to travel to site and the associated travel costs. No agent, employee or dealer is authorised to give any further guarantees or to accept any other liability on Munters' behalf in connection with other Munters products, except in writing with the signature of one of the Company's Managers.

WARNING: In the interests of improving the quality of its products and services, Munters reserves the right at any time and without prior notice to alter the specifications in this manual.

The liability of the manufacturer Munters ceases in the event of:

- dismantling the safety devices;
- use of unauthorised materials:

- inadequate maintenance;
- use of non-original spare parts and accessories.

Barring specific contractual terms, the following are directly at the user's expense:

- preparing installation sites;
- providing an electricity supply (including the protective equipotential bonding (PE) conductor, in accordance with CEI EN 60204-1, paragraph 8.2), for correctly connecting the equipment to the mains electricity supply;
- providing ancillary services appropriate to the requirements of the plant on the basis of the information supplied with regard to installation;
- tools and consumables required for fitting and installation;
- lubricants necessary for commissioning and maintenance.

It is mandatory to purchase and use only original spare parts or those recommended by the manufacturer.

Dismantling and assembly must be performed by qualified technicians and according to the manufacturer's instructions.

The use of non-original spare parts or incorrect assembly exonerates the manufacturer from all liability.

Requests for technical assistance and spare parts can be made directly to the nearest Munters office.



Aa/MIS/UmGb-2833-01/22 Rev 1.8