

Walk Around Tour of the HaloFogger® EXT





Solid Green: Indicates the Halo is plugged in and ready for use



Flashing Green: Indicates the Reservoir Door is not closed correctly or an error has occured. (*Refer to Troubleshooting section of this manual*)



Flashing Red: Indicates 30 second countdown after pressing the Start Button



Solid Red: Indicates the device is on and dispensing disinfectant. The room should be unoccupied.

Caution

A caution statement in this manual identifies a condition or practice which, if not corrected or discontinued immediately, could lead to serious injury or death.

1. KEEP OUT OF REACH OF CHILDREN.

2. Carefully read all instructions, warnings, cautions and first aid statements prior to use.

3. Do not enter room while HaloFogger[®] EXT is in use. Stay out of the room after treatment until room reentry wait time has expired. Keep door and windows closed.

4. Use only as directed.

5. Allow the full post-treatment wait time before re-occupying the room. Re-entry before the wait time has expired could result in sensory irritation and should only be done while using proper personal protection equipment (PPE) including wrap-around style goggles, 3M respirator mask and gloves.

6. Avoid inhalation of vapors or skin and eye contact with Halo Disinfectant fog.

7. The HaloFogger EXT is designed for ease-of-use. However, only properly trained individuals should use this device.

8. Electric shock hazard. Do not plug in if electrical plug or parts are wet.

9. There are no user-serviceable parts inside the Halo other than the nozzle. An operator may only perform maintenance procedures specifically described in this manual. The manufacturer should make all other repairs.

10. While in use, the body of the HaloFogger EXT may become warm to the touch. Use caution when handling.

Use personal protection equipment (PPE) including wrap-around style goggles and gloves when pouring disinfectant fluid into the device. Avoid splashing or overfilling which could harm the user and/or the device.
 Halosil International is not responsible for any injury or damage caused by using this device outside of the specific parameters detailed in this manual.

Operation Warnings

These warnings pertain to the actual use of the HaloFogger® EXT unit.

1. To ensure effectiveness and safety, use only with HaloMist[™] All-Purpose Disinfectant. Using any other manufacturers' disinfecting or cleaning product will result in serious injury, exposure and environmental damage.

2. Position the device on a secure surface to prevent rolling or moving while in use.

3. Use only a manufacturer supplied electrical cord.

4. Always unplug the power cord from the outlet before moving the device.

5. Clean debris from the device nozzle and funnel on a regular basis according to the instructions in this manual (see Maintenance).

6. Regularly check disinfectant fluid level to ensure sufficient volume is present to treat each particular room size.

7. Do not set the timer for longer than the suggested fogging time. Excessive fogging can create condensation, which may activate fire alarm systems.

8. Protect this device from severe impact or shock.

9. Take care to prevent water or other fluid from entering the device. Should this occur, allow to completely dry before use. Check the accuracy of all operating functions.

10. Do not tip the HaloFogger EXT on its side at any time unless completely empty and dry.

11. Store HaloFogger EXT in an upright position, in a safe, dry location. Do not place anything on top of the device.



12. Do not operate the HaloFogger EXT without the extended nozzle hose assembly fully connected. Damage will occur.

Getting Started with the HaloFogger® EXT



IMPORTANT

Before using your HaloFogger, it is important that you:

1. Plug the HaloFogger EXT into a power source for 24 hours to fully charge the HaloLog[™] Data Logger's internal back-up battery.

2. Download the HaloMist[™] All-Purpose Disinfectant Use Instructions.

Go to www.halosil.com, register your new fogger purchase to download.

Setup Instructions

Locate the connector end of the power cord. Insert the connector into the power receptacle located at the bottom of the rear panel of the HaloFoggerEXT. Ensure that the connector is securely in place. Plug the HaloFogger EXT into a standard electrical outlet. The green status indicator light will illuminate.

Setup and Filling

THE HALOFOGGER EXT IS DESIGNED FOR USE WITH HALOMIST[™] ALL-PURPOSE DISINFECTANT AND SHOULD NOT BE OPERATED WITH ANY OTHER MANUFACTURERS DISINFECTING OR CLEANING PRODUCT.

Installing Nozzle Assembly on the HaloFogger EXT

Locate the Nozzle Assembly from the HaloFogger EXT shipping box and unwrap. The assembly includes the high precision nozzle head, adjustable mounting arm, and extra long hose with quick connect hose couplings. Locate the graphic icon on each quick connect coupling, match with corresponding icon and bulkhead fitting on the top panel of the HaloFogger, and press firmly to engage connector until an audible 'click' is heard.. (*Press button on coupling to disconnect.*)



WARNING

Do not operate the HaloFogger EXT without the extended nozzle hose assembly fully connected. Damage will occur.

Filling Instructions

1. Open the HaloFogger EXT Reservoir Door by lifting front edge of door.

2. Locate the disinfectant fluid level indicator lights to the left of the funnel. One flashing red light will be illuminated indicating the HaloFogger EXT is empty.

3. Use personal protection equipment (PPE) including wrap-around style goggles and gloves when pouring disinfectant fluid into the device.

4. Open a gallon (3.8 liters) bottle of HaloMist[™] Disinfectant and SLOWLY pour the contents into the funnel area. AVOID SPLASHING.

5. The fluid level indicator lights will illuminate as you pour to show how much disinfectant is in the device.

6. The HaloFogger EXT holds two gallons (7.6 liters) of disinfectant when full. Stop pouring when the top green light on the fluid level indicator is illuminated. Do not overfill.

7. Wipe up any spills with a clean paper towel or rag. Thoroughly rinse off gloves and hands.

8. Close Reservoir Door.

9. The HaloFogger EXT is now ready to be used.

Basic Operating Instructions

1. Set the timer to the number of minutes specified for your room size. See Quick Instructions on rear of unit.

2. Plug the HaloFogger EXT into a standard, grounded electrical wall outlet. When the power connection has been made, the green status indicator light on top of the device will illuminate.

3. Check fluid level indicator lights. It is recommended the unit's reservoir be topped off before starting the treatment process. Refer to "Getting Started with the HaloFogger EXT" above to add/refill disinfectant.

 Connect the extended nozzle hose assembly to the HaloFogger. Match the graphic icons - AIR / LIQUID - to ensure correct connection. Press connector coupling onto fitting until an audible 'click' is heard.
 Before beginning a fogging application, the extended nozzle assembly of the HaloFogger EXT must be primed. See instructions for priming the extended nozzle assembly.

6. Position the extended nozzle assemply within the space to be treated. Attach the nozzle assembly using the suction cup mount or use an accessory (i.e. tripod for example), then remove the nozzle cap.

7. To begin a fogging application process, reset the HaloFogger EXT by unplugging the device from the power source, then immediately reconnect. Confirm the status indicator light is illuminated green. Press and hold the Start button for two (2) seconds. The green status light will begin to flash red indicating you have thirty (30) seconds to leave the room before the unit begins to dispense disinfectant.

8. Leave room, close and seal door. Post sign on door indicating the room should not be entered during the treatment process.

Instructions for Priming Extended Nozzle



1. Attach the ends of the HaloFogger EXT hoses to their respective air and fluid receptacles on the fogger. (See icons on fittings.)

2. Remove the protective nozzle cap from the nozzle.

3. Using the waste bottle provided, add one cup of tap water, then place it on the floor next to the rear wheel.

4. Take the clear tubing provided and drop one end into the waste bottle.





5. Working the adjustable ball joints of the nozzle assembly-mounting arm, point the nozzle straight down. Then move the nozzle assembly to the side of the HaloFogger EXT, locating the assembly above the waste bottle.

6. Lower the nozzle assembly so the exposed end of the clear tubing engages the nozzle. Then attach the nozzle assembly to the side of the fogger at that height using the suction cup mount.

7. Set the unit's Fogging Timer for 10 minutes.

8. Press the start button and wait for the disinfectant to spray into the bottle. **This may take up to 3 minutes**. When the disinfectant has started to spray consistently into the bottle stop the fogger by pressing the Start button twice in succession. The HaloFogger EXT is now primed and ready for fogging.

9. Remove the tubing the nozzle. Before moving nozzle assembly from side of fogger, place the protective nozzle cap back on the nozzle. Release the suction cup mount and relocate the fogger's nozzle assembly to the desired application location within the room to be treated.

10. Discard liquid in waste bottle. Save bottle and clear tubing for next use.



CAUTION

Hose Assembly will contain non-dispensed liquid disinfectant after priming and/or treatment is complete. Sudden movement of the hose assembly can allow captured liquid disinfectant to be released unexpectantly. Always replace the protective nozzle cap before moving the nozzle assembly. Always wear goggles and gloves when attaching/detaching the nozzle assembly and/or moving hose.

Fog Times (based on room size)

ft ³	m ³	Timer Setting
50 - 75	1 - 2	1 minutes
80 - 150	3 - 4	2
155 - 225	4 - 6	3
230 - 300	7 - 8	4
305 - 375	9 - 11	5
380 - 450	11 - 13	6
455 - 525	13 - 15	7
530 - 750	15 - 21	10
755 - 1125	21 - 32	15
1130 - 1500	32 - 42	20
1505 - 1875	43 - 53	25
1880 - 2250	53 - 64	30

Determining Room Re-Entry Time

The HaloFogger EXT is designed for disinfecting small spaces. If venting to the outside can be safely achieved you can do so after 90 minutes. Otherwise follow the minimum wait times below.

Whenever possible, delay re-entry and allow treated room to remain unoccupied overnight. Otherwise, select the appropriate room re-entry time directive for your facility:

A. If you have no handheld H2O2 sensor but a written protocol has been established by your organization or an authorized Halosil Distributor for the room or for the class of similar rooms using a handheld H2O2 sensor, use the time established by that protocol.

B. If you have a handheld H2O2 sensor but no protocol, reenter the room after at least 90 minutes with PPE to determine if the measured H2O2 level has dropped to about 1 ppm or below.

C. If no written protocol has been established and you have no H2O2 sensor, assume a waiting time of AT LEAST 110 MINUTES AFTER FOGGING. (110 minutes is the minimum wait time. Length of wait time increases with room size. See time chart below.)

Minimum Wait Times

Fog Time	Recommended MINIMUM Wait Time
10 minutes	110 minutes
15	120
20	130
25	140
30	150

Once the reentry time has been reached or exceeded, it is recommended that you open all doors, windows (if any), unseal HVAC vents and restart your HVAC system to allow increased ventilation and airflow circulation in the room. **Uncover smoke detectors.**

How to Use the HaloLog[™] Data Logger

Compatible with Apple® iDevices and Android® Devices that have Bluetooth 4.0

The HaloLog[™] App free of charge to download. For Apple[®] iDevices, please visit the App Store. For Android[®] Devices, please visit Google's Play Store.

What does HaloLog[™] App Do:

Keeping track of treatment compliance is important in certain environments. The HaloLog[™] allows applicators to use an Apple[®] iOS devise (i.e. iPhone or iPad) to:

• Download and view a time-stamped record for treatment cycles via a Bluetooth® connection.

Ability to record or document treatment location and other information for each cycle on the iOS App.
View total hours of operation for a specific HaloFogger.

• From the iOS App, download and email a file that contains the date, time, and run duration, along with any notes, for each HaloFogger operation since first deployment.

• Monitor different HaloFogger units with the same Apple iOS device.

How the HaloLog Feature Works:

The HaloLog data logger features an integrated Bluetooth device with a 'real time' clock and sufficient memory to record 30,000 run cycles.

The integrated logger automatically keeps a record of the date and time the HaloFogger starts & stops a dispensing run. It also keeps track of the total operating hours (dispensing) of the HaloFogger.

With the HaloFogger plugged into a power source, an iOS device with the HaloLog App installed can be connected to the HaloFogger data logger via Bluetooth. The HaloLog App does not need to be connected to a fogger before a treatment run is started. The on-board data logger captures all of the operating data, which can be reviewed later with the HaloLog App after each run, or as necessary.

An operator stands within 10' of a HaloFogger unit, and opens the HaloLog App. The app searches for the HaloFogger and once found, the serial number of that HaloFogger will appear. Once a connection is established, the date, time and duration of the HaloFogger treatment cycles can be viewed on the iOS device; and notes and/or location details can be entered for each cycle. Note: Only one iDevice with the HaloLog App installed can be connected to a HaloFogger at a time.

For archiving and printing, a CSV data file can be emailed directly from the HaloLog App and then imported into Excel for analysis and reporting.

The HaloLog data logger contains a rechareable battery that is charged every time the HaloFogger® is connected to a power source. If the HaloFogger is used infrequently, it is recommended to leave the device plugged in overnight once every three months.

System Requirements for compatible Devices

Bluetooth® 4.0 (BT LE), also known as Bluetooth Low Energy and Bluetooth Smart, first appeared in smart phones in 2011. It is required for the handoff feature of iOS 8 and Yosemite.

 Apple Devices:
 App supports the following Apple devices which are Bluetooth 4.0 equipped:

 iPhone
 ·iPhone 4 or newer

 iPad
 ·iPad, 3rd generation or newer

 Android Devices:
 ·App supports all Android devices that have OS 5.x+ (Lollipop)

Connecting HaloLog[™] App to HaloFogger[®]

1. Plug HaloFogger into a power source. The Status Indicator Light on top of the fogger will illuminate solid GREEN.

2. Using an iOS device with HaloLog App installed, stand within 10' of a HaloFogger and open the HaloLog App.

3. The Halo List Screen will open automatically and begin searching the vicinity for any HaloFogger

displayed under "Found HaloFoggers." If no foggers are found, "NONE" will be displayed.

equipped with the HaloLog Data Logger option. As the foggers are found, their serial numbers will be

4. To initiate a connection tap on any HaloFogger serial number displayed on the Halo List Screen. When the connection is made the Run Events Screen will appear. The top row of the screen will display the fogger's Serial Number and the Total Run Time for that unit highlighted in GREEN.

If the operator moves the iDevice out of range (10' max) the connection will be lost. The top row will no longer be GREEN and data downloading will be interrupted. To re-establish the connection, move the iDevice back into range.

Only one iDevice with the HaloLog App installed can be connected to a HaloFogger at a time.

Continue reading to see 'screen' for each action.



Connected

Not Connected.

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●●●○ Verizon 😤	10:08 AM	≁ * ■ 0	•••• Verizon 😤	9:50 AM	1 % 🔳
Halo-	15318 0.04	hrs	Halo	-15318 ~0.04	1 hrs
Run ID: 6 Room:	Thu Mar 23	3 2017 09:29:54	Run ID: 6 Room:	Thu Mar 2	3 2017 09:29:54
West room		09:29:23	West roor	n	09:29:23
lidg:	ON fo	r: 00:00:31	Bldg:	ON f	lor: 00:00:31
Halosil H		Isaiah S	Halos		Isaiah S
Just ran briefly	to test app		Just ran brie	fly to test app	
Run ID: 5 Room:	Fri Mar 1	7 2017 13:50:33	Run ID: 5 Room:	Fri Mar 1	17 2017 13:50:33
123		13:49:50	123		13:49:50
Ndg:	ON fo	c 00:00:43	Bldg:	ON f	or: 00:00:43
West		Rob	We	est	Rob
Run ID: 4 Room:	Fri Mar 1	7 2017 13:47:49	Run ID: 4 Room:	Fri Mar 1	17 2017 13:47:49
		13:47:15	1000111		13:47:15
3ida:	ON fo	00:00:34	Blda:	ON f	or: 00:00:34
aug.			Ling.		
Run ID: 3 Room:	Fri Mar 1	7 2017 13:44:59	Run ID: 3 Room:	Fri Mar 1	17 2017 13:44:59
		13:44:47	1000111		13:44:47
Bida:	ON fo	c 00:00:12	Blda:	ON f	or: 00:00:12
unug.			brog.		
Run ID: 2 Room:	Fri Mar 1	7 2017 11:00:25	Run ID: 2 Room:	Fri Mar	17 2017 11:00:25
GH	и стер	11:00:11	GH	EL ETEI	11:00:11
Email	Halo List	Utils	Email	Halo List	Utils
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Halo List Screen

When the HaloLog App is started, the Halo List screen will appear. The the top of the screen will show "Found HaloFoggers" listed by the fogger's individual serial number. Only HaloFoggers that are within range to the HaloLog App will be displayed.

> ACTION: Tap on a specific HaloFogger serial number to connect or 'handshake' to that fogger. You will automatically be taken to the Run Events Screen.

The bottom of screen displays "HaloLogs Stored on iDevice." This is a list of previously downloaded data logs identified by a fogger's serial number.

ACTION: Tap on specific HaloFogger serial number to view a previously downloaded run cycle log for review, editing or sharing. You will automatically be taken to the Run Events Screen to see this data.

•• •• •• AT&T Wi-Fi 🗢 10:16 AM	1 \$ 59% ■ }
Found HaloLogg	ers:
Halo-55555	
Halo Data Stored on i	Device:
Halo-15552	
Halo-55555	

Run Events Screen

The Run Events Screen shows a list of all Run ID's that have been downloaded to the iDevice.

When a HaloFogger is connected to the iDevice the top row of the screen will display the Serial Number and total Run Time for that HaloFogger highlighted in GREEN.

The HaloLog data stored on the selected HaloFogger will download automatically after the Bluetooth® "handshake" has been established, which is indicated when the top row turns GREEN.

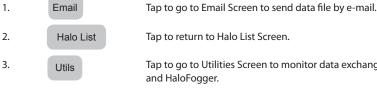
Each Run Event is listed with specific information including: Run ID, Room, Building, Operator, Date, Cycle Start and Stop Time, and duration of run event.

The very bottom row of the screen (highlighted in light BLUE) depicts how many records are kept on the HaloFogger and how many have been downloaded to the iDevice.

> ACTION: Tapping on any run event will open the Run ID Screen where information on that run cycle can be edited.

++ · · · · AT&T Wi-Fi 🗇	10:16 AM		1 \$ 59% ■⊡
	-55555	3.30 ł	nrs
Room:			09:45:44
Office 606	Sun Mar 1	12 2017	09:55:46
Bidg:		ON for:	00:10:02
Pharm	,		David
Certification of	completed		
Run ID: 8 Room:			7 09:14:21
Ward 31	Sun Mar 1	12 2017	09:39:30
Bidg:		ON for:	00:25:09
East W	0		Carol
Terminal Clean			
Torrinial Clea			
Run ID: 7 Room:		11 2017	23:15:47
Run ID: 7	Sat Mar 1		23:15:47 23:30:50
Run ID: 7 Room:	Sat Mar 1	1 2017	
Run ID: 7 Room: OP #3	Sat Mar 1 Sat Mar 1	1 2017	23:30:50
Run ID: 7 Room: OP #3 Bldg:	Sat Mar 1 Sat Mar 1 Ving	1 2017 ON for:	23:30:50 00:15:03
Run ID: 7 Room: OP #3 Bidg: West W	Sat Mar 1 Sat Mar 1 Ving Sat Mar 1	1 2017 ON for: 11 2017	23:30:50 00:15:03 Tom
Run ID: 7 Reom: OP #3 Bidg: West W Run ID: 6 Room:	Sat Mar 1 Sat Mar 1 Ving Sat Mar 1	1 2017 ON for: 11 2017 11 2017	23:30:50 00:15:03 Tom 23:15:12
Run ID: 7 Reom: OP #3 Bidg: West W Run ID: 6 Room:	Sat Mar 1 Sat Mar 1 Ving Sat Mar 1 Sat Mar 1	1 2017 ON for: 11 2017 11 2017	23:30:50 00:15:03 Tom 23:15:12 23:15:36
Run ID: 7 Reom: OP #3 Bidg: West W Run ID: 6 Room:	Sat Mar 1 Sat Mar 1 Ving Sat Mar 1 Sat Mar 1	1 2017 ON for: 11 2017 11 2017	23:30:50 00:15:03 Tom 23:15:12 23:15:36 00:00:24
Run ID: 7 Record: Bldg: West W Run ID: 6 Record: Bldg: NOT Bl	Sat Mar 1 Sat Mar 1 Ving Sat Mar 1 Sat Mar 1	1 2017 ON for: 11 2017 I1 2017 ON for:	23:30:50 00:15:03 Tom 23:15:12 23:15:36 00:00:24

Button selections at the bottom of screen:



Tap to go to Utilities Screen to monitor data exchange between iDevice

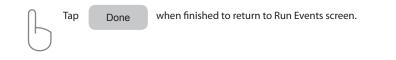
NOTE: Downloading of data will be interrupted if, during downloading, any input to the iDevice screen is initiated (tapping to select). Data downloading will resume the next time you re-connect.

Run ID Screen

In this screen, specific information about the treatment cycle can be added. By tapping on a text block, a room number, building name or location, the name of the operator and additional comments for that run cycle can be entered.

For convenience, the last entered building name is stored and will come up as a default for each HaloFogger. The operator information is stored and will come up as a default for all HaloFoggers monitored by the iDevice.

ACTION: Tap on any text block to update. A keyboard will appear to edit information. The "Comments" text block is limited to 178 characters.



	••••• AT&	T Wi-Fi 😤	5:03 PM	1 8 53%
		Halo-	102 ~2.4	
	Run ID: Room:	117		/ 19 2034 20:22:16
	OP	#1	Fri May	19 2034 20:54:12
	Billable:			ON for: 00:31:56
	BILLA	ABLE		
	Building: PC	ort Colbo	rne Genera	al Hospital
	Operator:		Kramer	
	-		Kramer	
	Comments:			
→	Termina	al Clean	post C-Diff	f discharge
	Delete		Done	
	1	45 record	ls on iDevice,	? on Halo

Identifying Run Events as Billable or Non-Billable

For convenience, all run events will identified BILLABLE as a default. Events that are not treatments (a test run for example) can be identified as NON-BILLABLE. These events will not appear in the downloadable CSV file, but will be reflected in the total HaloFogger Run Time.

ACTION: Tap on the "Billable" text block to change event to NON-BILLABLE. Change is highlighted in **RED**.

Tap Done

when finished to return to Run Events screen.



Deleting Events

Mark events DELETED by pressing the delete button. This function can be used to mark errors or other unforeseen events. These ID's will not appear in the downloadable CSV file and will NOT be reflected in the HaloFoggers total time.



A confirmation window will appear. Tap 'Ok" to continue.

Entire event ID screen will be highlighted in RED.



to return to Run Event Screen.

 UnDekte
 Done

 145 records on iDevice, ? on Halo

The run event will appear highlighted in RED with the word DELELTED shown.

To remove the DELETED identifcation from a Run Event



A confirmation window will appear. Tap 'Ok" to continue.

The **RED** highlight and word **DELETE** are removed.

Тар

to return to Run Event Screen.



Email Screen

Done

The HaloLog app allows logged data to be sent to any email address for reports, archiving and data back-up. \bigstar

ACTION: Tap Email

Select the range of HaloLog ID's for download by either manually specifying the starting and ending ID# or use pre-select buttons to choose a particular selection. The iDevice will remember the ID# of the "last sent" for each HaloFogger.



ACTION: Tap on the e-mail addresses to which data is to be sent . For convenience, the last e-mail entered address will be displayed by the iDevice.

Tap Touch here to enter email address #1 A keyboard will appear to enter address.

to enter new email address.

.....

ACTION: Tap Send Now to email data.

The iDevice's email screen will open to confirm message.

ACTION: Tap SEND in upper right corner of screen to send message.

* Back-up data from the HaloFogger[®] regularly by sending your data by e-mail to a secure address. Regular back-ups are the best and only protection against hardware failures.





Email Screen

The HaloLog App will create a .CSV file and open up the Email screen to send. The .CSV file is easily manipulated in MS Excel. Copy and paste new records downloaded to an existing file. Each Run ID log can be additionally coded within MS Excel.

Halo-15552 Total Time (hrs)	ID	ON Time	OFF Time	ON For	Room	Building	Operator	Comments
2.44	1	Wed Mar 08 2017 14:59:05	Wed Mar 08 2017 15:00:00	0:00:55		Port Colborne General Hospital	Kramer	
	2	Wed Mar 08 2017 15:00:45	Wed Mar 08 2017 15:15:43	0:14:58		Port Colborne General Hospital	Kramer	
	3	Wed Mar 08 2017 15:17:49	Wed Mar 08 2017 15:18:00	0:00:11		Port Colborne General Hospital	Kramer	
	4	Wed Mar 08 2017 15:18:17	Wed Mar 08 2017 15:18:35	0:00:18		Port Colborne General Hospital	Kramer	
	5	Wed Mar 08 2017 16:04:38	Wed Mar 08 2017 16:05:19	0:00:41		Port Colborne General Hospital	Kramer	
	6	Wed Mar 08 2017 15:39:16	Wed Mar 08 2017 15:39:29	0:00:13		Port Colborne General Hospital	Kramer	
	7	Wed Mar 08 2017 15:56:46	Wed Mar 08 2017 15:56:58	0:00:12		Port Colborne General Hospital	Kramer	
	8	Wed Mar 08 2017 16:00:43	Wed Mar 08 2017 16:04:01	0:03:18		Port Colborne General Hospital	Kramer	
	9	Wed Mar 08 2017 16:07:00	Wed Mar 08 2017 16:07:13	0:00:13		Port Colborne General Hospital	Kramer	
	10	Wed Mar 08 2017 16:34:46	Wed Mar 08 2017 16:34:55	0:00:09		Port Colborne General Hospital	Kramer	
	11	Wed Mar 08 2017 16:37:33	Wed Mar 08 2017 16:40:55	0:03:22		Port Colborne General Hospital	Kramer	
	12	Wed Mar 08 2017 16:57:04	Wed Mar 08 2017 16:57:23	0:00:19		Port Colborne General Hospital	Kramer	
	13	Wed Mar 08 2017 16:57:27	Wed Mar 08 2017 16:57:32	0:00:05		Port Colborne General Hospital	Kramer	
	14	Wed Mar 08 2017 16:57:44	Wed Mar 08 2017 16:57:52	0:00:08		Port Colborne General Hospital	Kramer	

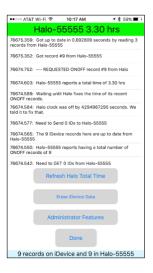
Utility Screen

The Utility Screen allows the data exchange between the HaloFogger and the iDevice to be monitored in real time.

This screen allows erasure of any logs on the iDevice.

	ACTION: Tap	Erase iDevice Data	to erase data logs from
\bigcirc	iDevice.		

Note: Doing this will NOT erase logs and the total Run Time stored on the data logger inside of the HaloFogger.



Additional Notes:

1. Only one iDevice can be connected at a time to a HaloFogger.

2. In the event that HaloLogs of the same HaloFogger have been downloaded to multiple devices: If one user has made changes to the HaloLog (for example added room, building or operator information), any other user must delete the HaloLog listed on their iDevice (displayed at the bottom of the Halo List screen) then connect to the respective HaloFogger and complete a new download, or connect and navigate to each Run ID that was changed by someone else and tap the 'Refresh' button to update the IDE's stored data to the HaloFogger current data for that ID.

3. "Administrator Features" is for factory use only.

4. BACK-UP DATE DATA by e-mailing to a secure e-mail address on a regular basis.

5. Every three months, leave the HaloFogger plugged in overnight to recharge the internal back-up battery.

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Maintenance

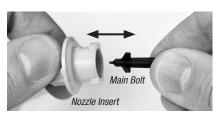
Nozzle Cleaning and Alignment

To keep your HaloFogger® EXT working at optimum performance, it is recommended that you clean the nozzle on a regular basis (example: clean nozzle once-a-week if fogger is used once-a-day or more.)

Step 1. Before performing any maintenance to the HaloFogger EXT, disconnect the power cord from the electrical outlet.



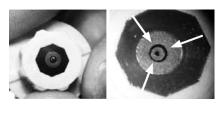
Step 2. **Remove Nozzle.** Using a 5/8" wrench, carefully turn nozzle counter-clockwise 90° and remove.



Step 3. **Separate Parts.** Remove Main Bolt from Nozzle Insert. Soak both parts in soap and water. Rinse parts thoroughly with water.



Step 4. **Reassemble Nozzle.** Carefully insert the Main Bolt back into the Nozzle Insert. Make sure the "wings" on the Main Bolt nest into the slots down inside the Nozzle Insert.





IMPORTANT - Position Main Bolt so a uniform gap surrounds the nozzle tip.



Step 5. Carefully **reinstall the nozzle into the Halo**, turning nozzle clockwise 90° to lock into place. Test Halo for straightness of nozzle stream.

Funnel Cleaning

The fluid funnel inside the HaloFogger EXT should be checked for debris on a regular basis. Visually inspect the funnel. If any debris is present, wipe with a clean towel dampened with water.

Ensure that the funnel screen is in place.

Troubleshooting

The following table of potential indicators provides a quick reference of the descriptions, probable causes and most common solutions regarding the operation of the HaloFogger® EXT. If the information in this table does not describe or solve the problem you are having, contact Customer Service at 1 302-454-8102, Monday through Friday, 9:00AM to 5:00PM EST.

Symptom	Possible Cause	Solution
No mist is being produced	The nozzle is clogged misaligned.	Remove the nozzle and clean according to the instructions in this manual.
	The disinfectant fluid tank is empty.	Check the fluid level indicator lights. If the orange light is illuminated, follow the fill instructions in this manual to refill the tank.
	Start button not pressed.	Press and hold the Start button for 2 seconds to begin fogging.
	The unit not plugged in.	Check to make sure that the power cord is plugged into both the HaloFogger and a wall outlet. Then, check to see that the wall outlet is working. The green status indicator light should be illuminated when properly set up.
	Extended hose assembly is not connected correctly.	Check both couplings to verify proper connection. An audible 'click' should be heard when the couplings are connected correctly.
Green indicator light is blinking	Reservoir Door is not closed correctly.	Close Reservoir Door making sure it "clicks" when closed.
	Magnet in Reservoir Door is not in place.	Call Customer Service.
No power	The power cord is not plugged in or the power source is not on.	Check to make sure that the power cord is plugged into both the fogger and the wall outlet. Then, check to see that the outlet is working. The green status indicator light should be illuminated when properly set up.
	The fuse is blown.	Check to see if the fuse is blown. Fuse (and a spare) is located behind a discreet panel just below where the power cord connects to the HaloFogger EXT.
Knocking noise	The compressor is not running properly.	Call Customer Service.
Disinfecting procedure is interrupted	Power loss during treatment process or other unforeseen circumstances.	Confirm power has been restored. Re- enter room after hydrogen peroxide concentration level is determined to be at or below 1 ppm. Restart treatment process from beginning.

Replacement Parts

To order replacement parts, contact Customer Service at 1 302-454-8102, Monday through Friday, 9:00AM to 5:00PM EST.

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Part 110V Power Cord (8')	Part Number 0750-110VPC
220V Power Cord (8')	0750-220VPC
Nozzle Assembly (includes retainer cap, nozzle insert, main bolt and O-ring))	0750-000

Re-Order Number

Part 110V HaloFogger® EXT (US and Canada)	Part Number 0753-110EXT
220V HaloFogger® EXT	0753-220EXT
HaloMist™ All-Purpose Disinfectant 1-Case (4x 1-Gallon Bottles)	HM10N0G4
Power Module	20PMOD12-110
HaloShield™ Vent Covers (2-pak bundle only)	0800-SHSVC
Chemical Indicator H202 Test Strips	H202STPS-50



Warranty and Registration

Follow unpacking instructions included with your new HaloFogger EXT. Halosil International is not responsible for damages caused by incorrect unpacking or transportation of the device.

Halosil International, Inc warrants the HaloFogger EXT, when purchased new, to be free of defects in material and workmanship and to perform in accordance with manufacturer's specifications for a period of six (6) months from the date of purchase from a Halosil International Authorized Reseller or Distributor. Halosil International will either repair or replace any device or component found to be defective or at variance from manufacturer's specifications within this time period. **Halosil International and its authorized distributors are not responsible for shipping costs associated with warranty returns.** Damage resulting from use, misuse, modification, neglect, accidents, normal wear and tear or shipping is not covered by this or any warranty.

Halosil International and its authorized distributors assume no liability for any accident, injury, death, loss or other claim related to or resulting from the use of this device. In no event shall Halosil International or its authorized distributors be held liable for incidental or consequential damages relating to or resulting from the use of this device or any of its parts.

This warranty is void if the HaloFogger EXT is not used in accordance with Halosil International's recommendations, if repaired, attempted to be repaired, and/or security seals are broken on rear panel, by an agent other than Halosil International without prior written permission from Halosil International, or if the HaloFogger EXT has been used with any solution other than Halosil International disinfectant product. This warranty is available to the original purchasers only and may not be transferred or assigned.

If during the warranty period your device requires attention most issues can be resolved easily by contacting Halosil International by phone: +1 (302)-454-8102 Extension 100 or via Email: info@halosil.com. When contacting Halosil International please provide the following information: contact name, company name, contact information (phone and email), address, purchase date, from which HaloFogger EXT was purchased, and the unit's serial number. Proof of purchase may be required. If Halosil International determines that the fogger qualifies for warranty coverage, a Return Merchandise Authorization (RMA) number will be issued along with instructions on where to ship the fogger and emptying the fogger before shipping. Halosil International is not responsible for shipping costs associated with warranty returns.



It is recommended that the fogger's original shipping box be retained for return shipping. Custommade packaging should be avoided as it will not protect the fogger during shipping. It is strongly recommended that any fogger being returned be shipped in its original shipping box ON A PALLET. Halosil International is not responsible for repair costs due to shipping damage.

Prepare the HaloFogger EXT for return shipment to Halosil International including the fogger and all parts packed in the device's original shipping box (or one available for purchase from Halosil International). The fogger must be emptied of all liquid in accordance to shipping instructions sent with RMA number. Halosil is not responsible for damage caused by fluid leakage during return shipping. HaloFogger EXTs that do not qualify for warranty coverage will be repaired or replaced at the customer's expense or the device will be returned to the customer. Halosil International is not responsible for shipping costs associated with repair returns.

Register your purchase to extend your Standard Warranty coverage. Registering your HaloFogger[®] EXT purchase will automatically, and at no additional cost, extend the standard six (6) month warranty coverage to one (1) year from date of purchase. (See Warranty for coverage details.) Registration will also entitle you to receive information on any product updates as they become available. To qualify for the warranty extension, registration of the HaloFogger EXT must be completed within thirty-days (30) from original date of purchase from a Halosil International Authorized Reseller or Distributor.

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Register the HaloFogger EXT online: go to www.halosil.com, click on "Register HaloFogger EXT", or register via email at sales@Halosil.com. Insert "HaloFogger EXT Registration" in the subject line and include the following information: contact name, company name, contact information (phone and email), address, purchase date, from whom HaloFogger EXT was purchased, and the unit's serial number.



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Learn how to reduce infection rates at your facility by visiting **www.halosil.com.** There you can find out more about the Halo Disinfection System[™], download literature and case studies, and find a distributor near you.

Made in the USA.