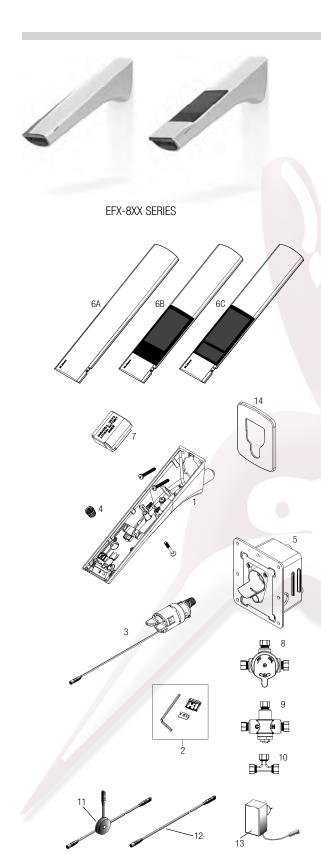
# SLOAN

# **BASYS® Infrared Sensor Activated**

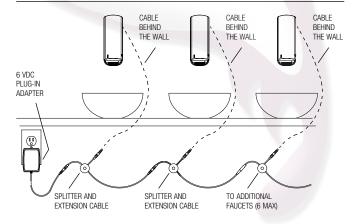


PARTS LIST—BASYS FAUCETS							
Item							
No.	Code No.	Part No.	Description				
1.	_	_	Wall Mount Faucet Assembly				
2.	3324104	EFX-1002-A	0.5 gpm/1.9 Lpm Multi-Lam Spray Head (includes insert, o-ring, 2.5 mm allen key, and removal tool)				
	3324103	EFX-1001-A	1.5 gpm/5.7 Lpm Aerated Stream Insert (includes insert, o-ring, 2.5 mm allen key, and removal tool)				
	3324102	EFX-1000-A	1.5 gpm/5.7 Lpm Laminar Stream Insert (includes insert, o-ring, 2.5 mm allen key, and removal tool)				
3.	3324162	EFX-1011-A	0.5 gpm/1.9 Lpm Solenoid Valve Caddy Assembly – Wall (Green)‡				
	3324163	EFX-1012-A	1.5 gpm/5.7 Lpm Solenoid Valve Caddy Assembly – Wall (Blue) ‡				
4.	0324019	EFX-19	Strainer (Filter)				
5.	7	EFX-1013-A	Mounting Assembly				
6A.	3324160	EFX-1009-A	Bowed Crown Assembly				
6B.	3324138	EFX-1010-A	Solar Crown Assembly				
6C.	3324139	EFX-1018-A	Solar Crown with LCD Assembly				
7.		_	CR-P2 Lithium Battery				
8.	3326009	MIX-60-A	Mechanical, Below Deck Mixing Valve				
9.	0326045	MIX-135-A	Thermostatic, Below Deck Mixing Valve				
10.	3365461	ETF-617-A	Bak-Chek Tee Assembly				
11.	0335023	EAF-23-A	Splitter				
12.	0335024	EAF-24-A	11-13/16" (300 mm) Extension Cable				
	0335025	EAF-25-A	47-1/4" (1200 mm) Extension Cable				
	0335015	EAF-17-A	126" (3200 mm) Extension Cable				
13.	0335009	EAF-11	Plug-in Voltage Adapter (US)				
	0335041	EAF-41	Plug-in Voltage Adapter (EU)				
	0335039	EAF-39	Plug-in Voltage Adapter (UK)				
	0335037	EAF-37	Box Type Voltage Adapter				
14.	3324165	EFX-1014-A	Wall Flange				
15.	_	_	Purge Tool				

NOTE: If changing flow rate caddy and spray insert must be changed in conjunction.
† Single Supply faucets include Bak-Chek\*
— in Item No. column = Not shown in illustration
— in Code No. and Part No. column = Not sold separately

- ‡ Old style / T-shaped contact. New style / Plug contact

# Electrical Connection for up to Six (6) Faucets Using One (1) Adapter



NOTE: HARDWIRE FAUCETS SUPPLIED WITH ONE (1) 47" (1.2 m) EXTENSION CABLE. NOTE: EXTENSION CABLES AVAILABLE SEPARATELY.
NOTE: USE ONLY SLOAN SUPPLIED POLARIZED AND KEYED CABLE ASSEMBLIES.
IMPORTANT: CUTTING AND SPLICING WIRES WILL VOID WARRANTY.







### TROUBLESHOOTING GUIDE

### Red LED in spout does not blink 2 seconds after battery installation.

- A. Battery placement incorrect or batteries have been discharged.
- B. Ensure batteries are installed properly. Check the orientation of each battery matches the positive (+) and negative (–) symbols shown on the battery compartment.

#### 2. Faucet DOES NOT function.

- A. Adhesive packaging label affixed over sensor eye.
- B. Remove adhesive label from sensor eye.

## 3. Faucet delivers water in an uncontrolled manner.

- A. Faucet is not working properly.
- B. Clean sensor window; if problem persists contact Sloan Tech Support.

# 4. Faucet DOES NOT deliver any water when sensor is activated.

INDICATOR: Solenoid valve produces an audible "CLICK".

- A. Water supply stop(s) closed. Open water supply stop(s).
- Open water supply stop(s).

  B. Strainer is clogged.

Remove, clean, and reinstall strainer. Replace strainer, if needed (refer to page 131).

# 5. Solenoid valve DOES NOT produce an audible "CLICK".

- A. Batteries low (battery powered models).
   Replace batteries (refer to battery replacement on page 130).
- B. Power failure (hardwire models). Check power supply.

## Faucet delivers only a slow flow or dribble when sensor is activated.

A. Water supply stop(s) are partially closed. Completely open water supply stop(s).

# Faucet DOES NOT stop delivering water or continues to drip after user is no longer detected.

- A. Faucet is not working properly.
- B. Clean sensor window; if problem persists contact Sloan Tech Support (see below).

# 8. LED indicator blinks RED when faucet is in use.

- A. Batteries low (battery powered models).
- B. Replace batteries (refer to battery replacement on page 132).

# 9. The water temperature is too hot or too cold on a faucet connected to hot and cold water supply lines.

- A. Supply stops are not adjusted properly. Adjust supply stops.
- B. For models with integral side mixing valve—Mixing valve is set improperly for the water temperature desired. Rotate mixing valve handle clockwise to decrease water temperature or counterclockwise to increase water temperature.
- C. Inadequate hot water supply. Adjust supply stops.

# **CARE AND CLEANING**

**DO NOT USE** abrasive or chemical cleaners (including chlorine bleach) to clean faucets that may dull the luster and attack the chrome or special decorative finishes. Use **ONLY** mild soap and water, then wipe dry with clean cloth or towel.

While cleaning the bathroom sink, protect the faucet from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.



When assistance is required, please contact Sloan Technical Support at: 1-888-SLOAN-14 (1-888-756-2614).





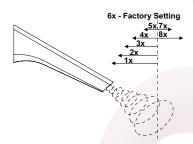
# **SENSOR RANGE ADJUSTMENT**

Factory setting is appropriate for the majority of applications and should not require resetting unless under extreme situations: high reflection or low light.

IR Activation (see previous page). To enter programming mode place finger on IR clic for 2 times then remove. Light on side of crown should blink to indicate programming mode.



Cover IR clic until LED flashes RED 4 times - hold IR clic on until LED flashes 1 time to 8 times from minimum to maximum range. See diagram below. Release when requested range is reached.





Wait, until LED flashes GREEN.



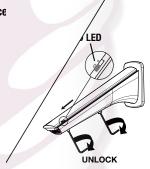
# **BATTERY REPLACEMENT**

NOTE: Replace battery when LED1 indicator flashes RED each time faucet is in use or when faucet stops functioning. LED1 is identified by the battery symbol.

NOTE: Turning off water is not necessary.

Remove crown by loosening 2 hex screws located on underside of spout and slide crown down and lift off.

NOTE: Screw is captive within fauce NOT fall out.



Remove red cover over the battery. Remove battery holder from the faucet body. Replace battery in the holder. Holder drops into the faucet body. Place the red cover over the battery.  $\[ \]$ 









# **OPERATION**

As the user's hands enter the beam's effective range, the beam is reflected back into the sensor receiver and activates the solenoid valve allowing water to flow from the faucet. Water will flow until the hands are removed or until the faucet reaches its automatic time out limit setting.







Function	Steps to Activate Function	Default Setting	IR Clic
IR Activation	Cover IR clic approximately for 2 sec. until LED will flash GREEN 1x - then remove finger from IR clic (Active for 5 sec.)		-
Cleaning Mode	IR activation; Cover IR clic 2x - confirmation of the function is active by a couple flashes by the LED; to return to normal operation cover IR clic 1x or the faucet will automatically return to normal function after 2 min.	2 min.	
12/24 Line Purge Feature	See below.	Off	Off 12HR 24HR
Sensor Range Adjustment	See next page.	6	1-8
Reset Electronics	IR activation; Cover IR clic 2x; LED will flash 5x Cover IR clic 1x for 5 sec. until LED flashes 4x, then remove finger from IR clic Wait for 20 sec.  (After 10 sec. water will flow for 6 sec. and automatically adjust to environment)	Manually	_
Security Off	After 90 seconds (max) of hand and/or object within sensor appears permanent, waterflow will stop and will remeasure environment	On	_

Please contact factory for more extensive programming options.

# **12/24 LINE PURGE FEATURE**

This feature will operate the faucet every 12 or 24 hours since last use, if not used to prevent stagnant water conditions.

Default purge duration is two minutes.

Consult factory regarding other timing options.

IR activation (see above). Cover IR clic approximately 24 sec. (ignore LED indications during this period). Release when requested program is reached. (See diagram to right). Programming mode will time out after 2 minutes if no changes are made.













# **UPGRADE FAUCET FUNCTIONALITY**

Remove crown by loosening hex screw located on underside of spout and slide crown down and lift off.

NOTE: Screw is captive within faucet body and will NOT fall out.

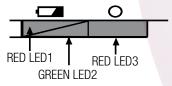


Place new crown on faucet by sliding onto spout and tightening hex screw on underside of spout.

**NOTE:** All electronics are fully encapsulated in the crown and thus protected from the environment and easy to replace or upgrade.



# **LED DISPLAY DIAGNOSTIC CODES**







**GREEN** COLOR LEDS BLINKING





COLOR LEDs ON

Function	LED1	LED2	LED3	Description 1	Description 2
Start Up Boot	RED	GREEN		LED1 and LED2 alternate blinking	Fast Toggle
Battery Check after Start Up	RED			LED1 on for 2 sec, if battery greater than 3.5V	
Line Power Check after Start Up			RED	LED3 on for 2 sec, if line power greater than 3.5V	
IR Adjust Process	RED			LED1 blinking while IR adjusts	Few seconds
IR Adjust IR		GREEN		LED2 on for 2 sec, if adjustment OK	
Battery Low	RED			LED1 blinks 3x, if battery is less than warning level	Only while in detection mode
Battery Empty	RED			LED1 double flashes 3x, if battery is less than empty level	Only while in detection mode
Valve Error			RED	LED3 double flashes 3x, if valve current error; flash after the 3rd error, off after the 3rd good operation	Flashes after the 3rd error, off after the 3rd good operation
IR Activation		GREEN		LED2 on for 2 sec, if IR-click has been activated	After 5 sec. automatically back to operating mode
Cleaning Mode	RED			LED1 4-in-1 flash, if cleaning mode is activated	During "Cleaning Mode" is activated Permanent 4-in-1 flashes



**REPLACE SPRAY INSERT** 

Remove crown by loosening hex

and slide crown down and lift off.

NOTE: Screw is captive within faucet body and will NOT fall out.

screw located on underside of spout

valve.



# BASYS® Infrared Sensor Activated

NOTE: Turning off water is not necessary, due to integrated automatic stop

# REPLACING THE SOLENOID STRAINER (FILTER)

NOTE: Turning off water is not necessary, due to integrated automatic stop valve.

Remove crown by loosening hex screw located on underside of spout and slide crown down and lift off.

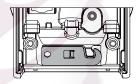
NOTE: Screw is captive within faucet body and will NOT fall out.



Rotate solenoid assembly counterclockwise through a 45° angle.



Retrieve spray removal tool located near the spray insert.



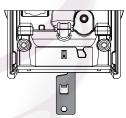
UNLOCK

Pull solenoid caddy from faucet. NOTE: Strainer can be removed, cleaned and replaced at this time.

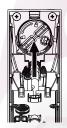




Insert spray removal tool into spray slot by sliding hook end of key between faucet spout and insert. Pull insert out of faucet once hooked.

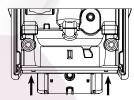


Insert new solenoid caddy at a 45° angle.



Install new insert.

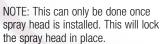
NOTE: If changing to a different flow rate solenoid caddy must be changed in conjunction.

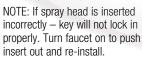


Rotate solenoid caddy clockwise to align with arrow, locking the unit and opening water path.



Return spray removal tool to storage location.





Slide on crown and secure.



Slide on crown and secure in 2 places.









### TROUBLESHOOTING GUIDE

### RED LED in spout DOES NOT blink 2 seconds after battery installation.

A. Battery placement incorrect or batteries have been discharged. Ensure batteries are installed properly. Check the orientation of each battery matches the positive (+) and negative (-) symbols shown on the battery compartment.

### 2. Faucet DOES NOT function.

A. Adhesive packaging label affixed over sensor eye. Remove adhesive label from sensor eye.

### 3. Faucet delivers water in an uncontrolled manner.

- A. Faucet is not working properly.
- B. Clean sensor window; if problem persists contact Sloan Technical Support (see below).

# 4. Faucet DOES NOT deliver any water when sensor is activated.

INDICATOR: Solenoid valve produces an audible "CLICK".

- A. Water supply stop(s) closed. Open water supply stop(s).
- Upen water supply stop(s).

  B. Strainer is clogged.

Remove, clean, and reinstall strainer. Replace strainer (filter), if needed (refer to page 139).

INDICATOR: Solenoid valve DOES NOT produce an audible "CLICK".

- A. Batteries low (battery-powered models).

  Replace batteries (refer to battery replacement on page 136).
- B. Power failure (hardwire models). Check power supply.

## Faucet delivers only a slow flow or dribble when sensor is activated.

A. Water supply stop(s) are partially closed. Completely open water supply stop(s).

# 6. Faucet DOES NOT stop delivering water or continues to drip after user is no longer detected.

 A. Faucet is not working properly.
 Clean sensor window; if problem persists contact Sloan Technical Support (see below).

# 7. LED indicator blinks RED when faucet is in use.

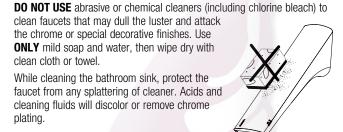
A. Batteries low (battery-powered models).

Replace batteries (refer to battery replacement on page 136).

# 8. The water temperature is too hot or too cold on a faucet connected to hot and cold water supply lines.

- A. Supply stops are not adjusted properly. Adjust supply stops.
- B. For models with integral side mixing valve—mixing valve is set improperly for the water temperature desired.
   Rotate mixing valve handle clockwise to decrease water temperature or counterclockwise to increase water temperature.
- C. Inadequate hot water supply. Adjust supply stops.

## **CARE AND CLEANING**



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