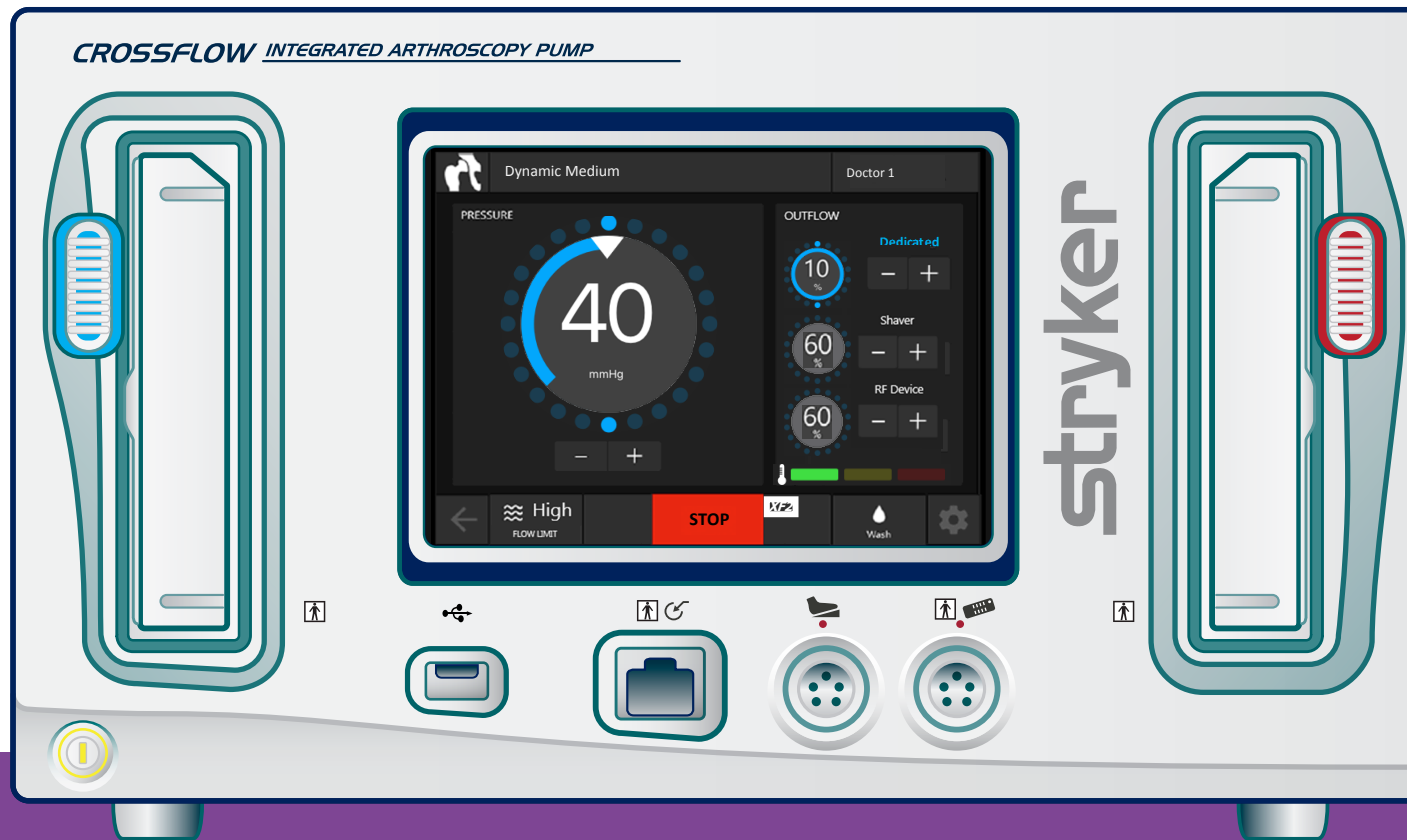


# CrossFlow quick start guide





## Table of contents

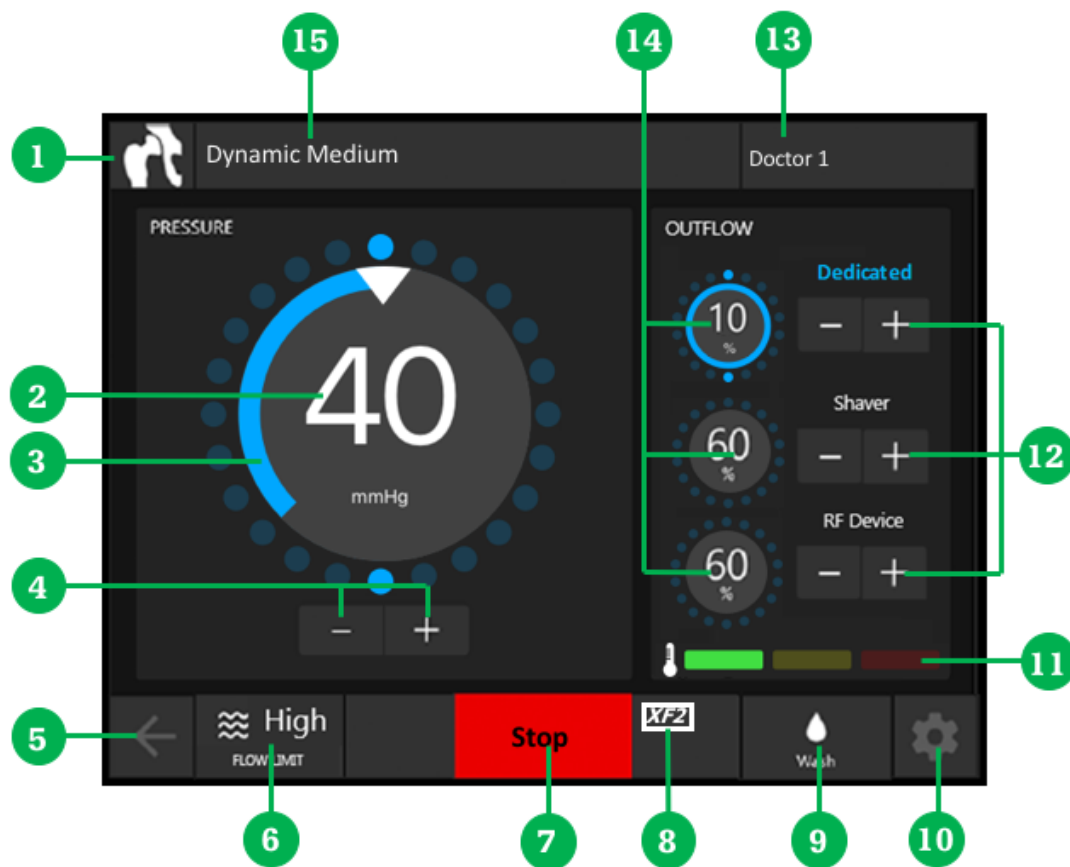
### CrossFlow quick start guide

- 1 Pump interface reference
- 2 Pump start up
- 3 Setting navigation
- 4 Pressure, suction and flow settings
- 5 Wash function
- 6 Cannula settings
- 7 Shaver and RF console integration
- 8 Footswitch and hand control settings
- 9 Temperature monitoring settings
- 10 Save surgeon profile settings



# 1

## Pump interface reference CrossFlow interface map



### User interface reference

1. Joint settings
2. Set pressure (mmHg)
3. Actual pressure
4. Adjust set pressure up/down
5. End case
6. Flow limit pop-up menu
7. Start/stop
8. Resection console connection icon
9. Wash (use for better visibility)
10. Settings menu
11. Temperature indicator (during RF use)
12. Adjust suction up/down
13. Surgeon profile
14. Suction indicators
15. Scope/cannula combination in use

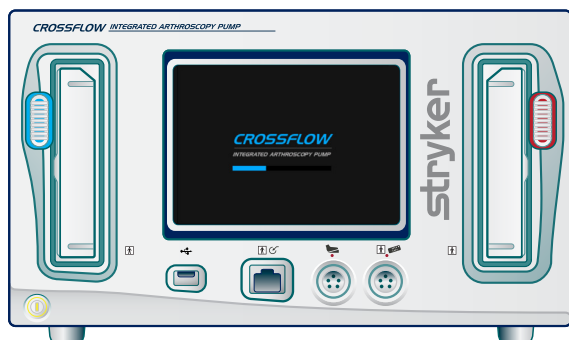
**NOTE:** Identifies which scope/cannula combo is selected for the procedure

## 2

## Pump start up

### How to start up the pump and navigate to the Run Screen

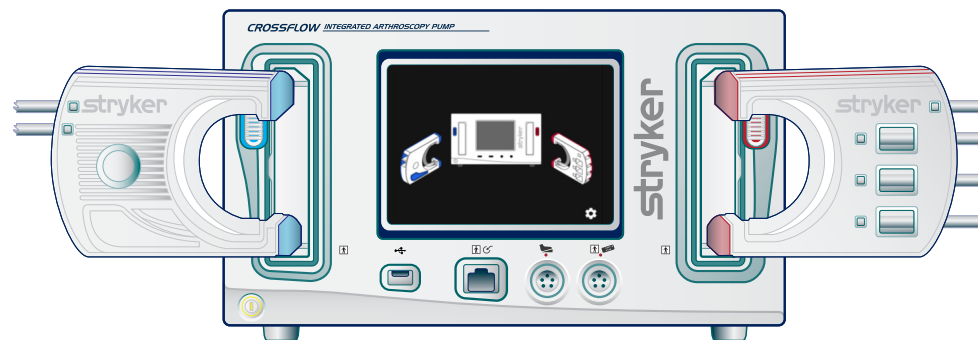
#### Step 1: Turn on pump



= Power on the pump

The CrossFlow start up screen will appear and a progress bar will indicate that the pump is starting up.

#### Step 2: Insert cassettes



Wait for "insert cassette" screen to appear, then align the coloured side of the cassette facing out toward its matching coloured button. Green checkmarks will indicate that the cassette(s) have been properly inserted. Once the Inflow Cassette is inserted, the pump will advance to the User Profile Selection Screen.

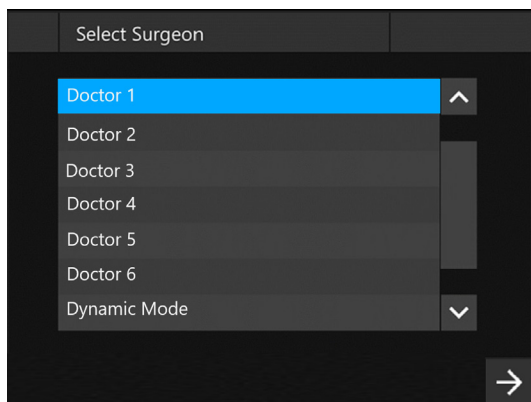


= Inflow cassette (blue)

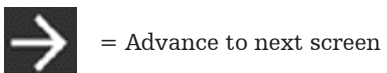


= Outflow cassette (red)

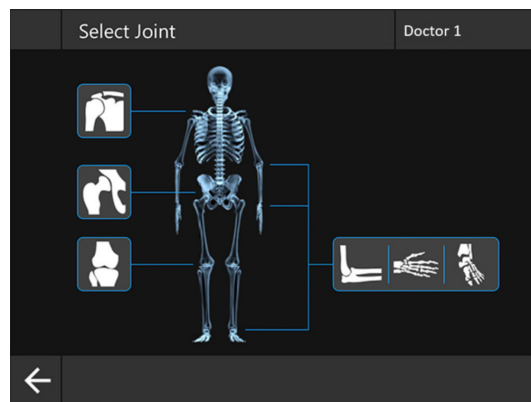
### Step 3: Select user profile



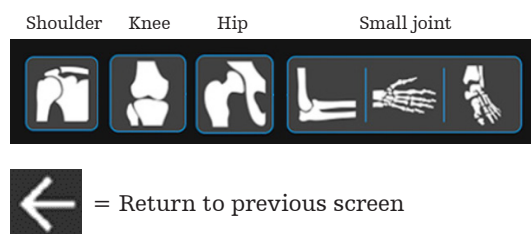
Select the name of the surgeon performing the case. If no profile is uploaded for that surgeon, press “Dynamic Mode”.



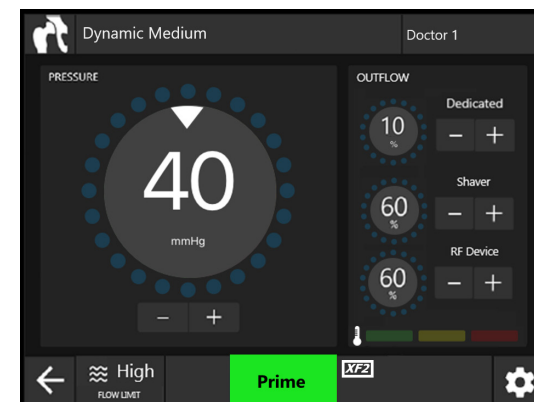
### Step 4: Select joint



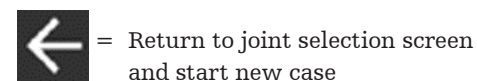
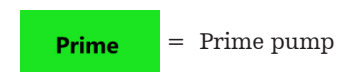
Press the icon that identifies the operative joint:



### Step 5: Start pump



Once tubing is set up and saline is spiked:

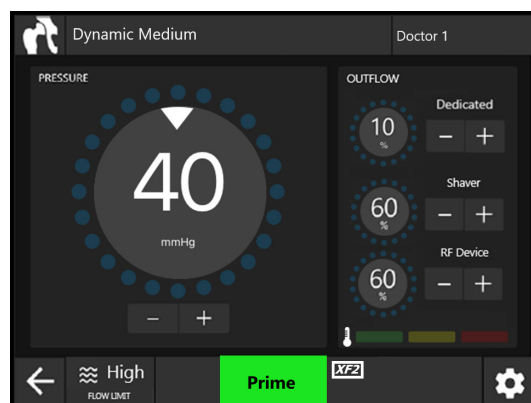


## 3

## Settings navigation

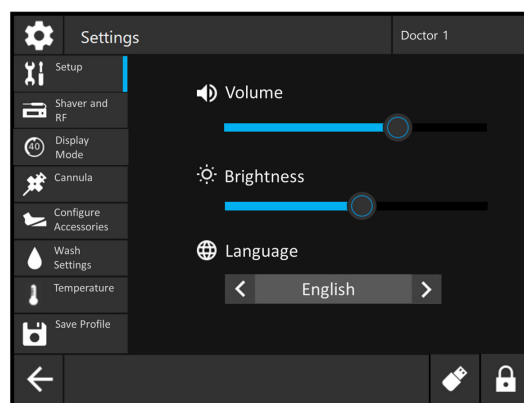
How to access and adjust general settings for the CrossFlow pump.

## Step 1: Access settings menu



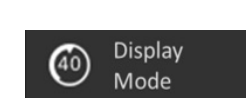
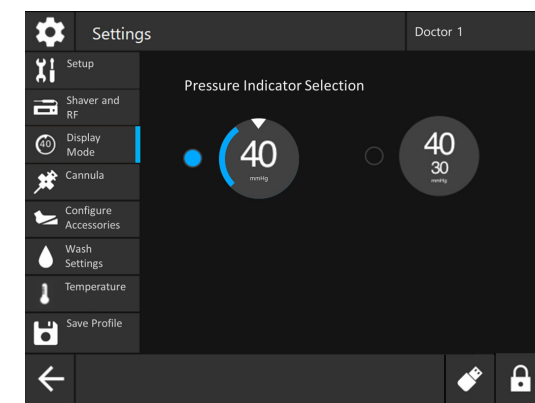
= Pump customisation menu

## Step 2: Adjust general settings



= Setup sub-menu

## Step 3: Change pressure display



= Actual pressure display settings screen

Change how pressure displays on the run screen by pressing the desired icon.

**Note:** This new pressure display will now appear on the run screen of the pump.

## Step 4: Return to run screen



= Exit menu

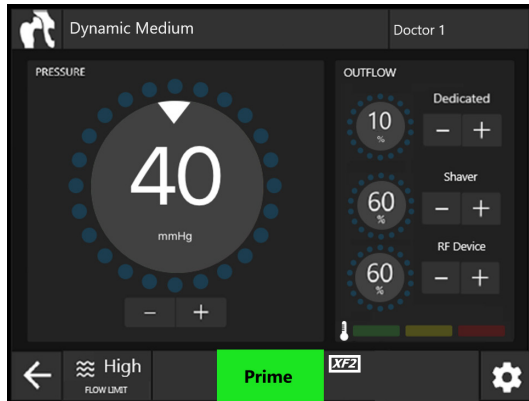
General settings are now customised.



# 4

## Pressure, suction and flow settings How to access and adjust set pressure, suction and flow settings.

### Step 1: Start the pump



**Prime** = Prime pump

**Stop** = Stop pump

**Start** = Start pump

### Step 2: Adjust pressure

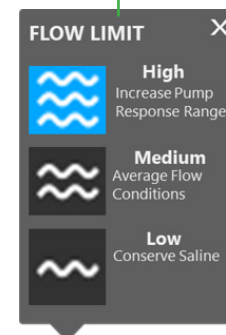
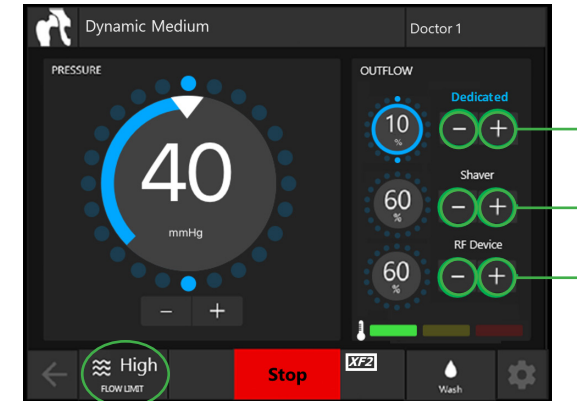


**+** = Set pressure up  
**-** = Set pressure down

Rotating dots indicate the console is pumping fluid

**Note:** Actual pressure indicates the pressure in the joint.

### Step 3: Adjust suction and flow



#### Flow

Flow limit pop-up menu accessed to set inflow limit

#### Suction

**+** = Suction rate up  
**-** = Suction rate down

**Note:** Each dial sets and displays suction for the listed line

### Settings in detail

#### Set pressure

Set pressure is the pump's target pressure in the joint.

**NOTE:** On the CrossFlow console, pressure is adjusted in increments of 5mmHg

#### Suction (Inflow/outflow mode)

Suction refers to the flow rate the outflow pump will achieve through the outflow cannula, shaver, and RF tube.

**NOTE:** Suction will adjust in increments of 10%

#### Flow limit

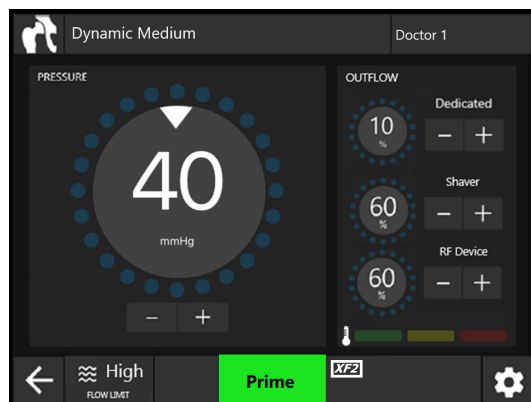
Flow is the maximum flow rate the inflow pump will reach while attempting to achieve the set pressure.

## 5

## Wash function

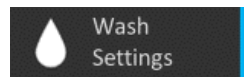
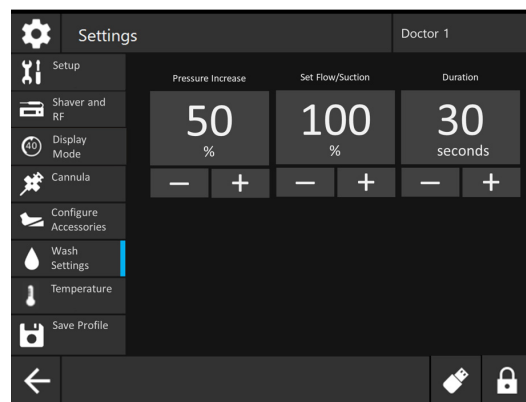
### How to access and adjust the wash function.

#### Step 1: Access settings menu



= Pump customisation menu

#### Step 2: Adjust wash settings



= Wash settings sub-menu



= Increase pressure/flow/duration settings



= Decrease pressure/flow/duration settings

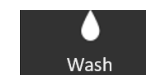


= Exit settings menu

#### Step 3: Start pump to perform wash



= Wash function active



= Wash function inactive

## Understanding wash

### Wash function

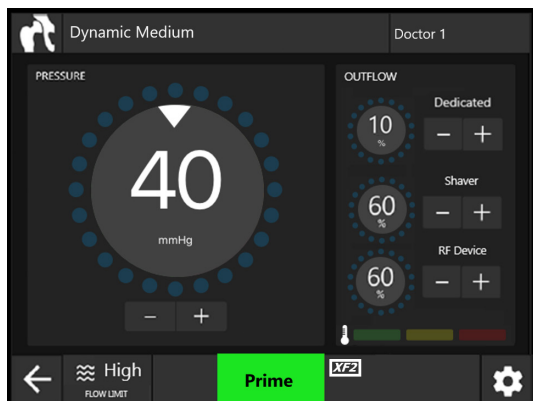
The wash function allows for a customised, quick increase in pressure and flow to clear debris, control bleeding and improve visualization in the joint. Can customise to last for a duration up to 120 seconds.

**EXAMPLE:** 50% Pressure increase of 50 mmHg set pressure would become 75mmHg during wash cycle.

## Cannula settings

How to set cannula and scope combination or Dynamic Mode settings.

### Step 1: Access settings menu



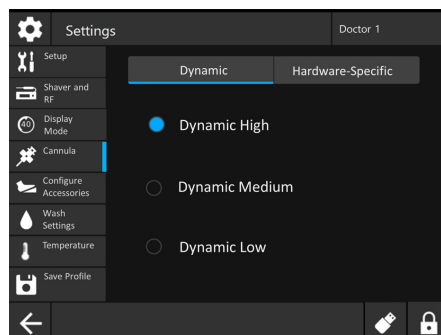
= Access settings menu



**Note:** The selected Cannula setting is displayed on the top banner of the Run Screen.

### Step 2: Choose a desired option

Dynamic Mode options provide optimised flow for a range of scope cannula combinations. Hardware-specific provides customised flow for the scope cannula combination you are using.



#### Dynamic Mode

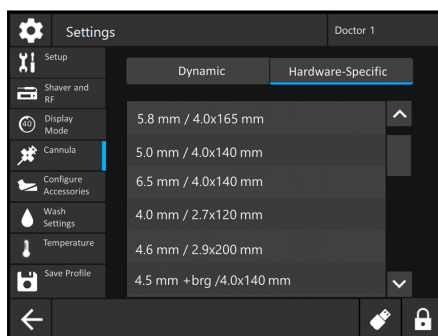
Select a cannula setting



= Cannula settings menu

While operating in "Dynamic Mode", select one of the following options:

Dynamic mode setting	Cannula diameter (mm) – scope diameter (mm) = x
Dynamic Low	$x \leq 1\text{ mm}$
Dynamic Medium	$1\text{ mm} < x \leq 2\text{ mm}$
Dynamic High	$x > 2\text{ mm}$



#### Hardware-specific alternative tab

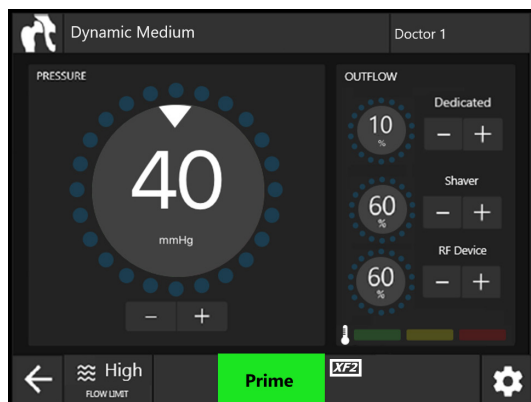
As an alternative to Dynamic Mode cannula settings, the specific scope/cannula combination can be selected in the hardware-specific tab.

## 7

## Shaver and RF console integration

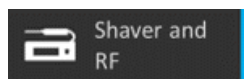
How to access and adjust approved resection console integration settings.

## Step 1: Access settings menu



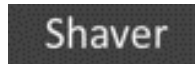
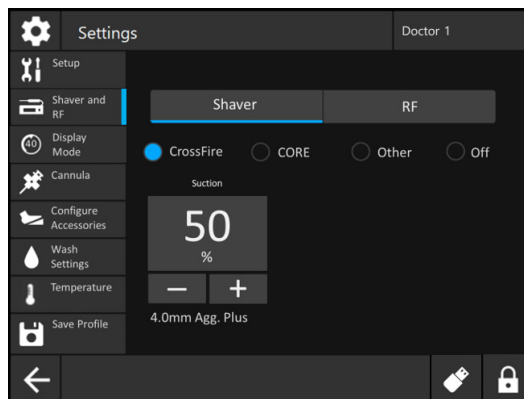
= Pump customisation menu

## Step 2: Access shaver and RF sub-menu



= Shaver and RF sub-menu

## Step 3: Customise shaver



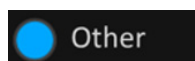
= Shaver console settings



= When using CrossFire consoles



= When using CORE consoles



= When using an approved shaver console



= When no shaver console is connected

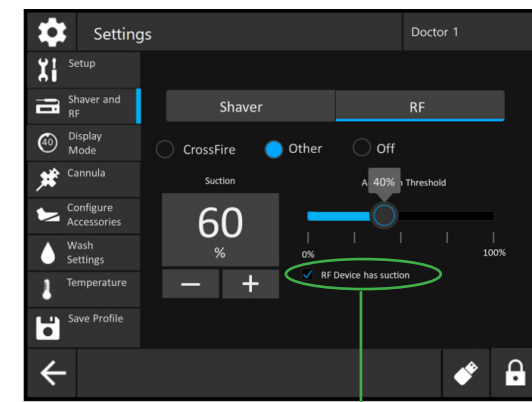


= Suction up



= Suction down

## Step 4: Customise RF



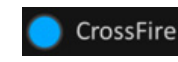
**NOTE:** While in "Other", suction must be checked if using RF devices with suction. Uncheck if using RF without suction.



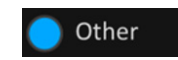
= RF console settings

**NOTE:** Adjust Activation Threshold to optimise pump response to other RF or Shaver consoles.

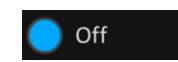
## Press



= When using CrossFire consoles



= When using an approved RF console



= When no RF console is connected

## Step 5: Return to run screen



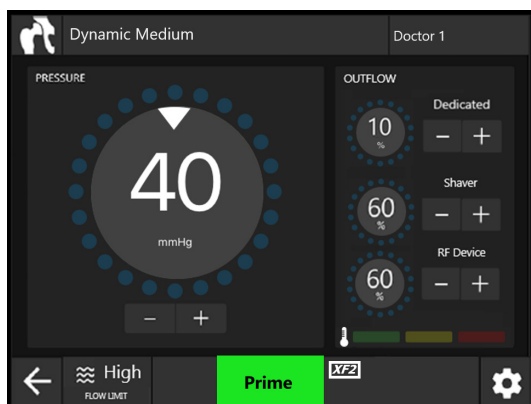
= Exit menu


Integration of shaver and/or RF devices are now customised

## Footswitch and hand control settings

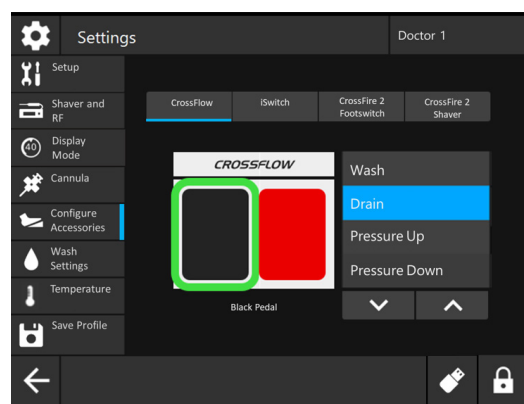
**How to customise and program settings on compatible footswitches and the CrossFire 2 Hand Control.**


### Step 1: Access settings menu



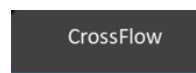


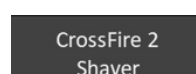
 = Access settings menu

### Step 2: Customise footswitch

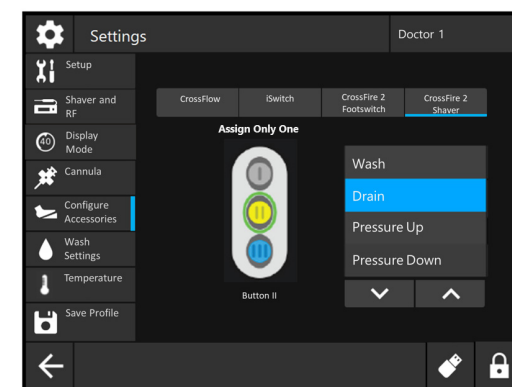


 = Footswitch/hand control settings



#### Press

-  = When using CrossFlow footswitch
-  = When using CrossFire 2 footswitch
-  = When using iSwitch wireless footswitch
-  = When using iSwitch wireless footswitch

### Step 3: Assigning button(s) functionality to the Footswitch and Hand Control:




Select button(s) on the footswitch or hand control diagram (the selected button will outline in green).

  = Scroll features menu

Highlighted feature will assign to the selected button(s).

### Step 4: Return to run screen

 = Exit menu

The hand control and footswitch are now customised.

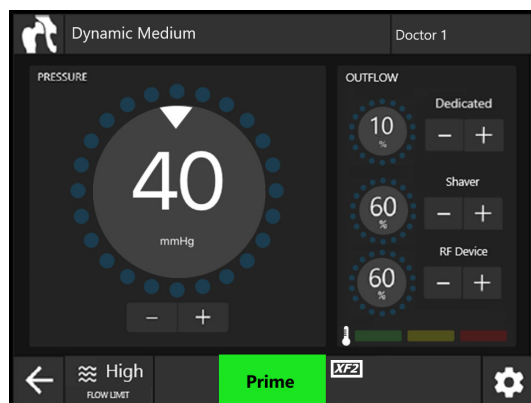
**NOTE:** CrossFire 2 Hand Control and CrossFire 2 Footswitch can have only one button programmed with CrossFlow function.

## 9

## Temperature monitoring settings

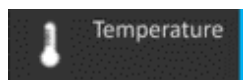
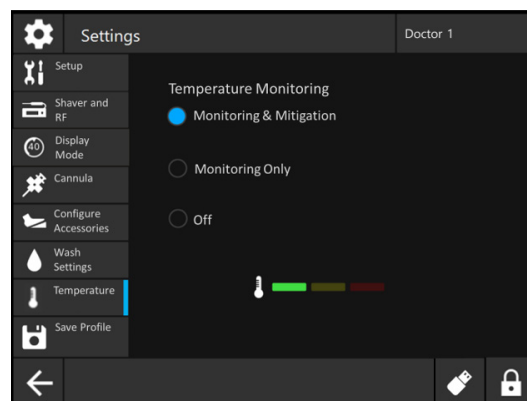
How to select temperature monitoring and mitigation settings for use with SERFAS probes.

## Step 1: Access settings menu



= Pump customisation menu

## Step 2: Customise temperature monitoring



= Temperature monitoring sub-menu

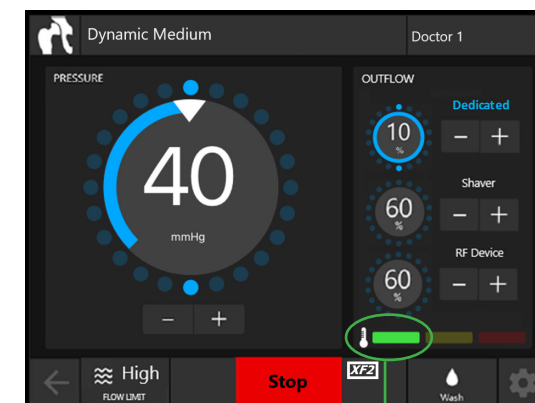
## Press:

☒ Monitoring & Mitigation = For temperature monitoring, display and mitigation actions

☐ Monitoring Only = For temperature monitoring and display with no mitigation actions

☐ Off = For no temperature monitoring, display or mitigation actions

## Step 3: Return to run screen



Temperature indication is displayed

Return to run screen



= Exit menu

**NOTE:** Temperature monitoring is only available with CrossFire 2 using SERFAS suction RF probes.

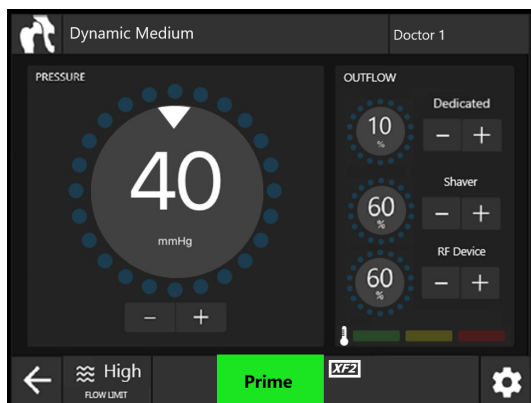
The temperature settings are now customised.

# 10

## Save surgeon profile settings

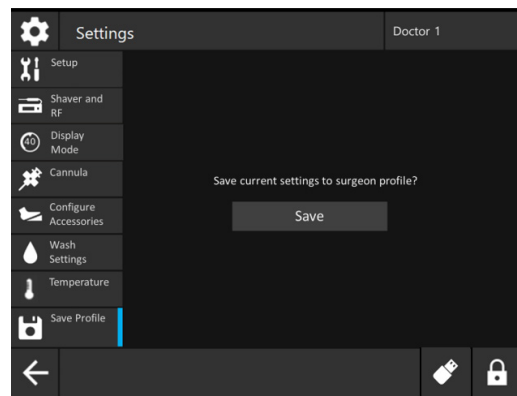
How to save the current CrossFlow settings to the custom surgeon profile.

### Step 1: Access settings menu




 = Pump customisation menu

### Step 2: Save settings to surgeon profile



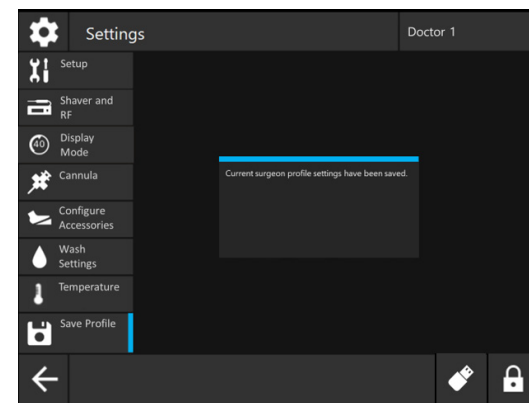
 = Save profile sub-menu

**Press:**


 = Save current settings to custom surgeon profile

**NOTE:** The settings of the default dynamic profile cannot be saved over.

### Step 3: Return to run screen



Return to run screen

 = Exit menu

The updated settings are now saved to the Custom Surgeon Profile

## Sports Medicine

**This document is intended solely for the use of healthcare professionals.**

A healthcare professional must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that healthcare professionals be trained in the use of any particular product before using it in surgery.

The information presented is intended to demonstrate the breadth of Stryker product offerings. A healthcare professional must always refer to the package insert, product label and/or instructions for use before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets.

Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: CrossFlow and Stryker. All other trademarks are trademarks of their respective owners or holders.

This material is not intended for distribution outside the EU and EFTA.

**1000900963 Rev C**

Copyright © 2021 Stryker

SDL 02/2021

SMACC: CRSSFL\_BRO-4\_28478

[stryker.com](https://www.stryker.com)