

Microdialysis Fraction Collector, FC-90 User Guide

Package Contents:

FC-90
Power supply
Power cord
Plate adapter
(2) 96 well plates (use with provided adapter)
Slit Seal sample pack
Fraction collector needle(s)

1. Installation
2. Operation
3. Cleaning
4. Adjustments



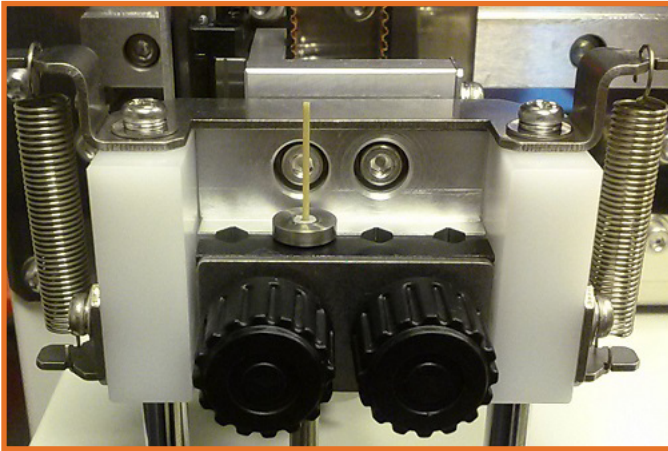
1. Installation

Download App

The Android App for operating the fraction collector is available on the Google Play Store. “FC-90 Control App by Amuza”

After installing the app, pair your Android device with the FC-90.

NOTE: to pair the fraction collector with a different device, please power it off for at least 10 seconds.

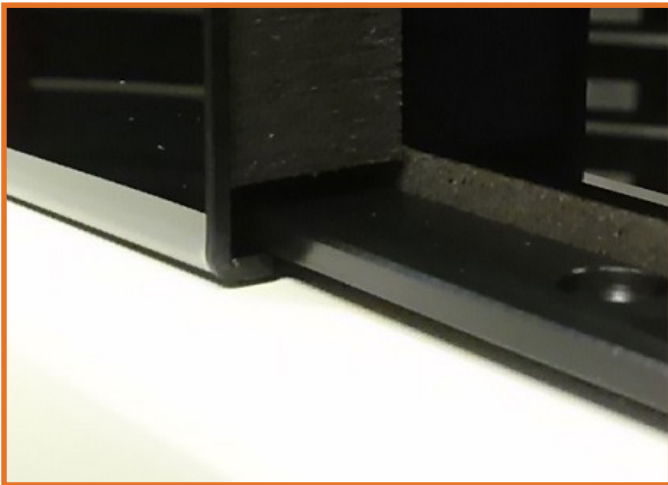


Install 1, 2, or 4 needles.

When correctly inserted, the flange on the needle should rest on the needle carrier:

For single channel operation, install the needle in the second hole from the left. For two channel operation, use the center two holes. Tighten the thumbscrews to prevent the needles from moving during operation.

Please remove extra needles when using fewer channels.



Loading plates.

Please use a plate adapter (provided) if using a flexible plate.

Please use a self-closing plate seal to prevent evaporation.

Always ensure the tray cover is properly installed during operation. The flanges on the bottom of the tray cover should slide below the rails on the body of the fraction collector, and the latches should be engaged.

This will ensure proper temperature control and prevent condensation inside the fraction collector and the plate.

Adjust Needle Height

Press the “three dot” Settings button at the top right . Select “Setting”. Set the needle height so that the tip of the needle just touches the bottom of the well. Press “!” then let the needle go to the home position. Once the needle has stopped moving, press “OK”.

Attach tubing to the needles

Loosen the thumbscrew on the top of the fraction collector and then raise the needle cover. Thread tubing through the hole in the needle cover and attach to the PEEK needles.

2. Operation

In Status:

STATUS		Info <input type="checkbox"/>
Start	-	
Sequence	1	
Method	-	
Collection Time	-	
Current Pos.	-	
Temperature	5.8 / 6	

Create a method

A method specifies a starting well, a number of fractions, and the collection time for each fraction.

Method #1	
First Sample	A1
Number of Fractions	30
Collection Time	0 min 10 sec

Create a Sequence

A sequence can perform up to 10 methods one after the other, thus allowing you to incorporate delays and different collection times into your experiment.

Sequence #1									
Combination									
1	2	1	3	-	-	-	-	-	-

Sequence #2									
Combination									
1	-	-	-	-	-	-	-	-	-

2. Operation

In Settings:

SETTING ▲

Start Mode

Immediate Start

Start at 02:00 AM

Delay Start 30 min

Number of Channels 4

Sequence 1

Temperature 6

Choose a start mode

Choose immediate start, start delayed to a specific time of day, or start delayed by a specific number of minutes.

Choose the number of channels

1,2, or 4. This limits the collector to 96, 48, or 24 samples per channel per plate, respectively.

Choose the Sequence.

Temperature

Choose a temperature down to 6 deg. C. Press the Thermometer button to turn the temperature controller on or off.

Press “Ready” to home the needle carrier and the tray. Press “Start” to begin collecting fractions.

Buttons:



Tray: Move Tray to the front.

Manual: Advance the needle to the next well.

Start/Ready: When the fraction collector is first turned on Ready will bring the needles and tray to their home positions. Afterwards this button will start automated collection.

Thermometer: Turns the temperature controller on/off.

3. Cleaning

1. After completing sampling, bypass the microdialysis probe.
2. Load a disposable syringe with chlorine bleach diluted 50 to 100x with purified water. Remove the perfusate syringe and attach the bleach syringe, then push bleach solution through the tubing and fraction collector needles. Leave the bleach in place for at least 15 min. To remove bacteria from the outside of the fraction collector needles, dip the exposed part of the PEEK needle in diluted bleach solution.
3. Disconnect all tubing and flush each individual piece of tubing with water several times. The fraction collector needles should each be flushed with water several times as well.
4. Sonicate the needle to remove contaminants from between the PEEK needle and the stainless steel cover. Sonicate the needle in a tall narrow vessel such as a 15 ml plastic tube containing 3 to 4 cm of purified water with standing position of the vessel.

Note: There are detergents in household bleach that can interfere with HPLC analysis, so thorough rinsing is essential. High concentrations of ethanol can damage the fraction collector needles.

4. Adjustments

Adjusting the needle and tray positions:

Press the “three dot” Settings button at the top right .

Select “Setting”. Set the needle height so that the tip of the needle just touches the bottom of the well. Press “!”, then let the needle go to the home position. Once the needle has stopped moving, press “OK”.

To change the XY position, select Administrator. The password is “pass”. Adjust the needle so that when it is lowered it is centered in the well.

Note: To prevent needle damage, The XY position can not be changed while the needle is lowered.

Please contact Eicom USA with any questions or for additional instructions.

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FC-90 Compliance Information

Category	Country	Standard
Radio	USA	FCC CFR47 Part 15 C, para 15.247
	FCC ID:	T9J-RN41-1
	Europe	EN 300 328-1
		EN 300 328-2 2.4 GHz
	Canada	IC RSS-210 low power comm. device
		6514A-RN411
EMC	USA	FCC CFR47 Part 15 subclass B
	Europe	EN 55022 Class B radiated
		EN61000-4-2 ESD immunity
		EN61000-4-3 radiated field
		EN61000-4-6 RF immunity
		EN61000-4-8 power magnetic immunity
Bluetooth	LISTED	B013180