

# MiniCoup (Coupon Sampling)

## Introduction

With the MiniLog2 coupon method chosen, every second the On and Off potential, DC and AC current are sampled. The time delay for the Off potential is user selectable with 10, 20, 50, 100 or 200ms delay. Each Off potential is measured during 20ms time, building a median value out of 20 samples.

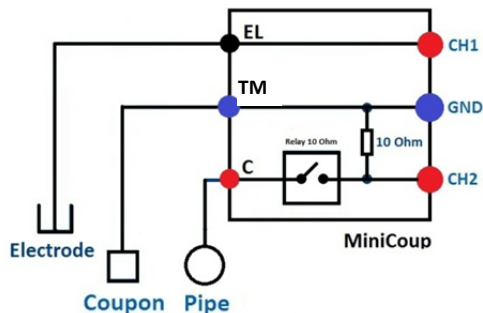
The MiniCoup adapter measures the current with a 10 Ohm shunt. The coupon sampling can last up to 48h.

Feel free to do your own wiring when not liking to use the MiniCoup adapter. For the relay you can use the build in relay, but the 10 Ohm shunt has to be added externally.



## MiniCoup wiring for the coupon sampling

Connect the MiniCoup adapter with the channel sockets and put the MiniCoup metal plug into the "Feat(ure)" socket on the MiniLog2 bottom (beside the USB charging socket).



Connect the electrode with the black MiniCoup socket, named "EL"

Connect the coupon with the blue MiniCoup socket, named "TM"

Connect the pipe with the red MiniCoup socket, named "C"

## Starting the Coupon sampling

Press **LOGGER** followed by **RATE**

Press **▲** or **▼** as often until you see "Coupon" in the top right corner

Press **PROG** as often until seeing the suiting delay time (10, 20, 50, 100 or 200ms)

Press **START** and **OK**

The sampling starts and the 1<sup>st</sup> line displays the Pot-On value and the 2<sup>nd</sup> line the "Pot Off" value.

## Changing displayed values to current and back to potential

Pressing **▲** displays the current values (line 1 DC, line 2 AC)

Pressing **▲** again displays the potential values (line 1 On, line 2 Off)

## Stopping and transferring the sampling

Press **STOP** for a few seconds or wait until the buffer is full (2 days).

Starting a new sampling will delete the previous sampling.

One can read out the coupon sampling like any other data logging. Compared to a standard sampling, the channel names will differ (ON, OFF, I DC and I AC) instead of (DC1, DC2, AC1, AC2).

# 1ms Sampling

## Introduction

The 1ms sampling is done with channel 1 only and filters are deactivated. Auto range is deactivated, please select the range (Hi, Lo or Mic) manually before starting. The display will not show any values while sampling with 1ms, because there's no processing time left for dealing with the LCD display.

## MiniCoup with 1ms sampling

MiniCoup in combination with 1ms sampling will allow the evaluation of the ON and OFF potential curve with 1ms accuracy.

Generally if 1ms sampling is chosen and switching was activated before, MiniLog2 will open the internal and the MiniCoup relay every 1s for 100ms duration.

You can use the same wiring for the MiniCoup 1ms coupon measurement as described before in the Coupon sampling description.

## Starting the 1ms sampling

Press **LOGGER**

Press **▲** as often until you see CH1 showing DC and AC

Press **▼** as often until you see a suitable range (Hi, Lo, or Mic)

Press **RATE**

Press **▲** or **▼** as often until you see "1 ms" in the top right corner

Press **START** and **OK**

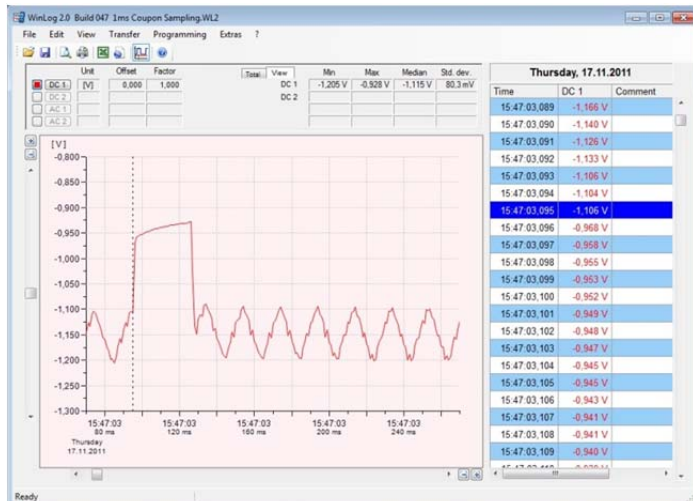
The sampling storage memory will be erased first and then the sampling starts.

## Stopping and transferring the sampling

Press **STOP** for a few seconds or wait until the sampling storage memory is full (30min). Starting a new sampling will erase the previous sampling.

One can readout the 1ms sampling like any other data logging.

Please note that only channel 1 is used, while channel 2, 3 and 4 are disabled.



Coupon Sampling with MiniCoup and 1ms sampling time