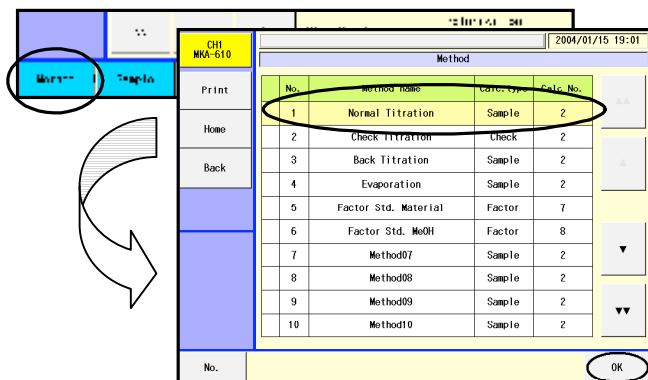


MKA-610 Quick Reference

Ver.00

1. Basic procedure (Take a sample for direct analysis)



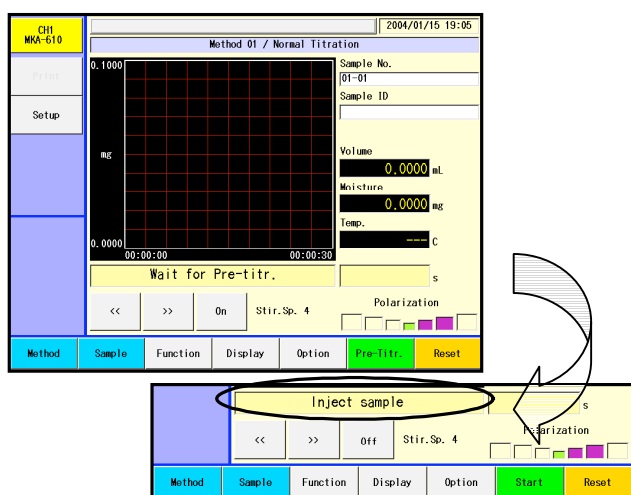
< Selection of Method (meas. para.) >

- 1) Press [Method] button.
- 2) Select a Method on "Method" display.
- 3) Press [OK] button.

Main display of selected Method appears.

* First, you select a Method appropriate for the sample you are going to measure.

Ex.) Select No. 1 Normal Titration.



< Dehydrate in the titration flask >

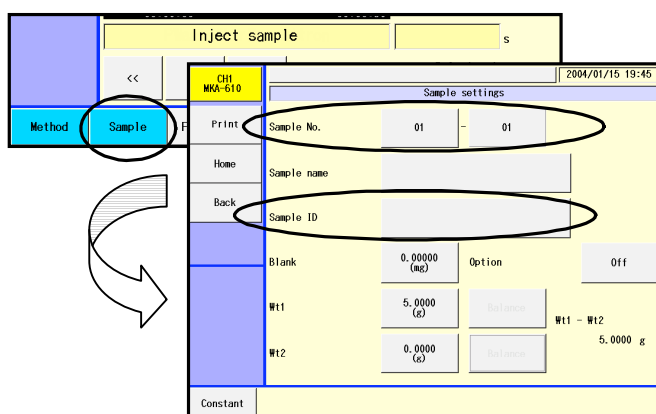
- 1) Press [Pre-Titr.] button to start pre-titration
- 2) Wait until the below message appears:

Inject sample



Please press [Start] button

* When pre-titration is finished, the button changes from [Pre-Titr.] to [Start].



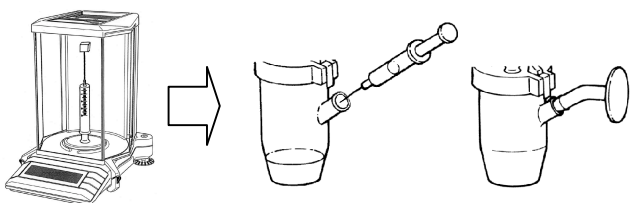
< Sample setup >

- 1) Press [Sample] button.
- 2) Enter Sample No., Sample name and Sample ID by pressing each button where the item is indicated.

Ex.) Sample No. : Press [01] on the left.
(Change to 02-03) [Press [2], and then, press [OK].

Press [01] on the right.
Press [3] and then, press [OK].

Sample ID : Press Sample ID button.
(Change to LINE-2) Press [L], [I], [N], [E], [-], [2] and [OK].



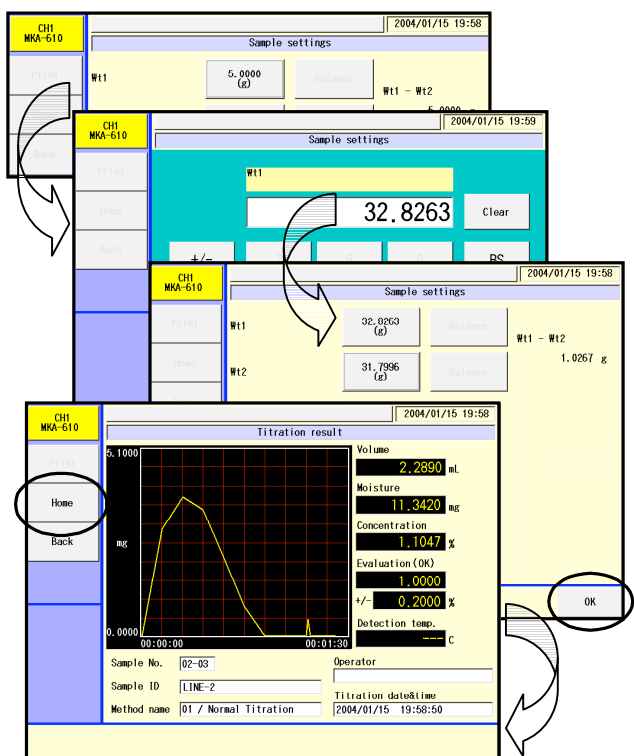
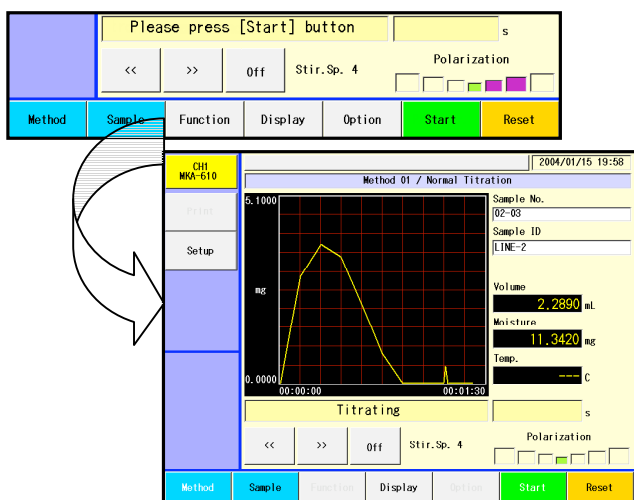
< Sampling and titration >

- 1) Take a sample liquid into a syringe.
- 2) Weigh the syringe with sample in it, and record the weight (Wt1).
- 3) Inject the sample into the titration flask, and press [Start] button. Titration will start under the preset conditions.

*** $Wt1 = \text{Sample} + \text{Tare}$**

- 4) While titration is underway, weigh the syringe after sample is injected, and record the weight (Wt2).

*** $Wt2 = \text{Tare} + \text{Sample residue}$**



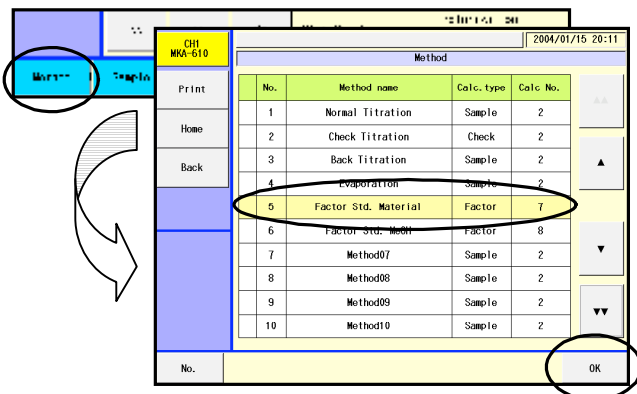
< Enter sample weight and display the result >

- 1) After titration is finished, "Sample settings" display will appear. Press Wt1 button and enter Wt1, and confirm with [OK] button.
 - 2) Press Wt2 button, and enter Wt2, and press [OK] button.
 - 3) Press [OK] button at the lower right corner on display. The titration results appear on display, and will be printed out when a printer is connected.
 - 4) Press [Home] button to return to Main display.
- For repeated measurements, start procedure from <Sample setup>.

Statistical calculation

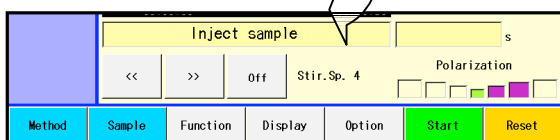
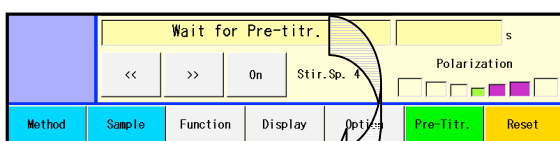
Press [Function] – [Result list].
 Select the results with [Pick out] button.
 Delete unnecessary data with [Disable] button.
 Press [Statistics] button.

2. Factor measurement of Karl Fischer reagent (Direct discharge of standard liquid)



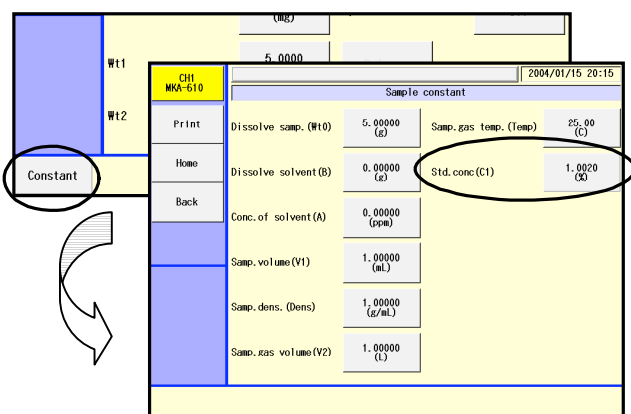
< Selection of Method for factor meas. >

- 1) Press [Method] button.
- 2) Select Method for factor measurement. Make sure the Calc. type is "Factor" and Calc. No. is "7".
Ex.) Select Method No.5 Factor Std. Material.
- 3) Press [OK] button to return to Main display.



< Dehydrate in the titration flask >

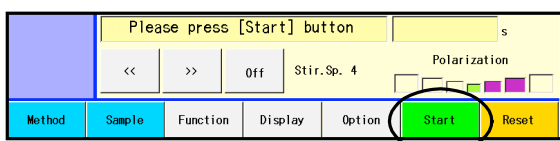
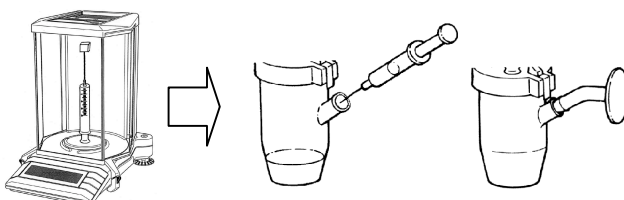
- 1) Press [Pre-Titr.] button to start pre-titration.
Wait until the below message appears:
Inject sample
↓ ↑
Please press [Start] button



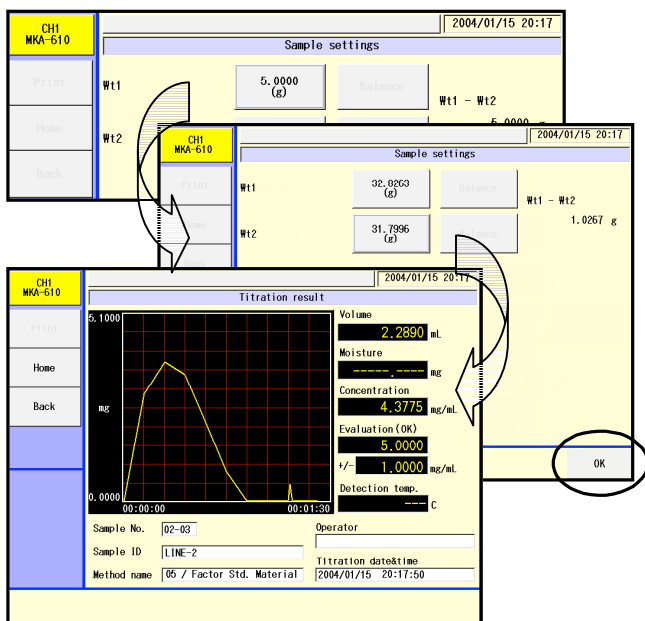
< How to enter concentration of standard liquid >

- 1) Press [Sample] button.
- 2) Press [Constant] button.
- 3) Enter the water concentration of standard liquid for Std. conc (C1).
Ex.) Enter 1.002% for 10.02mg standard liquid.
- 4) Press [Back] button to return to previous display.
* Sample No., Sample name and Sample ID must be preset on previous display.

< Sampling and titration of standard liquid >

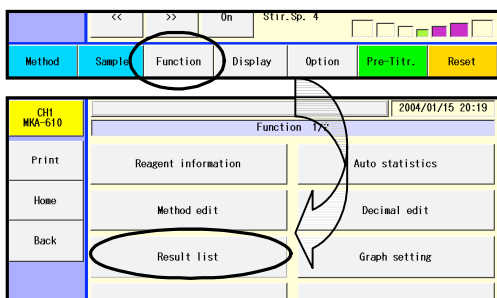


- 1) Take the standard liquid into a syringe.
- 2) Weigh the syringe with the standard in it, and record the weight (Wt1).
- 3) Inject the standard liquid into the titration flask and press [Start] button. Titration will start under the preset conditions.
- 4) During the titration, weigh the syringe after sample is injected, and record the weight (Wt2).



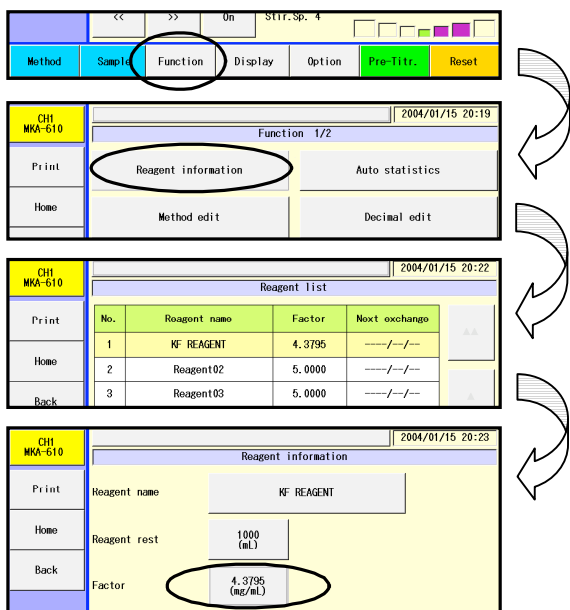
< Enter the weight of standard substance >

- 1) After titration is finished, "Sample settings" display will appear. Press Wt1 button and enter Wt1, and confirm with [OK] button.
- 2) Press Wt2 button, and enter Wt2, and press [OK] button.
- 3) Press [OK] button at the lower right corner on display. The titration results appear on display, and will be printed out when a printer is connected.
- 4) Press [Home] button to return to Main display.
- 5) Repeat the above for 3 to 5 times starting from <Sampling and titration of standard liquid>.



< How to evaluate mean value >

- 1) Press [Function] – [Result list] button.
- 2) Press [Pick out] button to select the data.
- 3) Press [Execute] button to display the list of selected data.
- 4) Point the cursor on those data unnecessary for calculation for mean value, and press [Disable] button to delete them.
- 5) Press [Statistics] button to show the results of batch calculation, and record the mean value.



< Setting the factor of Karl Fischer reagent >

- 1) Press [Function] – [Reagent information] button.
- 2) Select the reagent used in factor measurement, and press [Edit] button. Ex.) Select No.1 KF REAGENT.
- 3) Enter the mean the above-evaluated into Factor.
- 4) Press [Home] button to return to the main screen display.