# User Guide

CAPPwash

Cat.No. W-8, Cat.No. W-12 and Cat.No. W-16 8, 12 and 16 channel washer



Cappelen Laboratory Technics ApS Landbrugsvej 10. DKK-5260 Odense S, Denmark Tel. +45 66 13 61 40 Fax +45 13 27 70

We thank you for having bought this CAPPwash and hope that you will be happy with it. In order to get full benefit of the washer, we kindly ask you to observe the following;

## Directions for use

	Ņ	l	<u>.</u>
housing with a vacuum source (See also fig. 3)	Connect the inlet marked "vac" on the back side of the	housing with a source for washing solution. (See also fig. 2)	Connect the inlet marked "fill" on the back side of the

- nousing with a vacuum source. (see also fig. 2)

  Place the washing pins of the CAPPwash into the wells of a microplate or -strip, with the black adjustment screws standing on the microplate.
- Press the knob on the upper part of the housing for the required number of washings.
- Move the CAPPwash to the next row or column and repeat the procedure, etc., etc.

Note: Please press the knob briefly each time you wash, as a prolonged activation causes liquid overflow.

If necessary, the filling speed can be adjusted by means of a tube clamp, squeezing the tubing for the washing solution.

If preferred, it is also possible to wash in the "traditional" fashion with the opening of the washing pins at the top of the wells in the starting position. When pressing the knob, the wells of the microplate are filled. Upon release of the knob the filling is discontinued, and the pins must be lowered into the wells with a resultant emptying of the wells. This filling method may also be used to dispense a solution into wells, or to keep the wells filled after the washing procedure.

From the factory, the CAPPwash is prepared to fit most current flat bottomed microplates or -strips. Adjustment screws on each side of the washing pins may be used to adjust the depth of the pins into the wells in case of other well depths, or in case of round bottomed or V-shaped microplates. Most importantly, please observe that the distance of the washing pins to the well bottom must be equally long at both sides. If not, the wells will be filled unevenly, with a resultant inefficient washing and

loss of control of overflow. To measure the depth of the washing pins into the wells, a special ruler is enclosed with every CAPPwash. (See also under Depth adjustment fig. 1)

Please rinse the CAPPwash with distilled water after each use. Omission to do so may cause clogging of the pins. For the event that clogging of the pins should occur, a rinsing wire which follows with each CAPPwash is used. After having used the rinsing wire to remove the clog from the washing pin, it can be recommended to further remove any possible reminiscence of the clog from the interior of the washer. Just connect the vacuum to the "fill" inlet, press the knob for a short moment, and the washer interior is now cleaned. Please observe to remove the vacuum from the "fill" inlet.

Other than that, the CAPPwash needs no special maintenance. After long time use, however, it may be necessary to exchange the O-rings and/or the spring. (See fig. 3). For this purpose a Spare Part Kit, Cat. No. W-300, is available.

The recommended working vacuum is 8 cm Hg, and the maximum vacuum 12-13 cm Hg.

#### Warranty

The CAPPwash is guaranteed for a period of 2 years from the date of delivery against defects in materials, and during this period any defective materials will be replaced at no charge. Labour to repair such defects, equally shall be provided at no charge.

# Made in Denmark by CAPP

CAPPwash  $^{IM}$  is a Trademark of Cappelen Laboratory Technics ApS. Patent is applied for  $^{\odot}$  Cappellen Laboratory Technics ApS.

02/1998

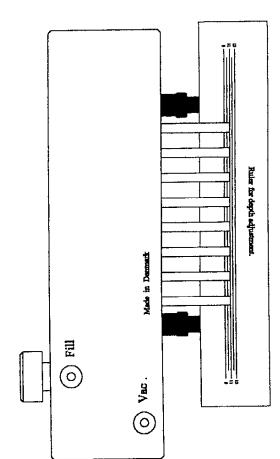


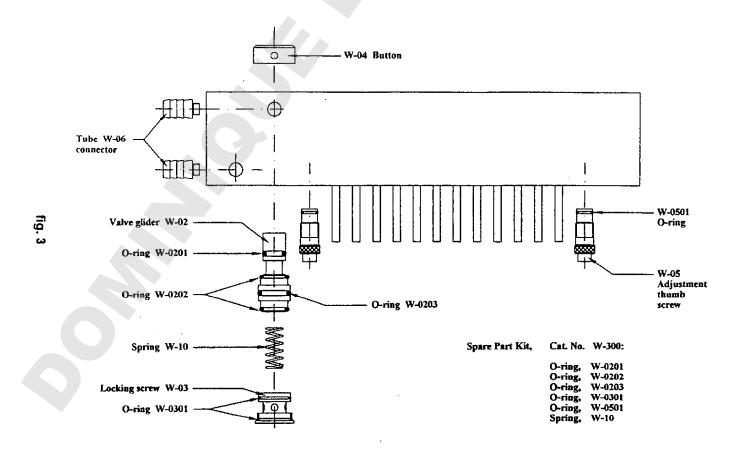
fig. 1

## Depth adjustment

In order to set the depth of the washing pins into the wells, kindly place the ruler for depth adjustment as shown on the above drawing, with the lower edge of the ruler pressed against the two black adjustment thumb screws of the washer.

Please make sure that the distance from the ends of the washing pins to the bottom of the wells is 0.5 mm as a minimum, and that the distance is the same at both ends.

NB. Please note that the washer is pre-set to fit flatbottomed microplates or -modules of the most current brands; Corning Costar, Greiner and Nunc. Only if using microplates of different brands -or well configurations, or if accidentally having turned the adjustment thumb screws, it may be necessary to adjust the depth.



# Specifications and order information

### APPwash

;	
Cat.No.	Description
₩-8	8 Channel Washer for 96 well microplates or strips
W-12	12 Channel Washer for 96 well microplates or strips
W-16	16 Channel Washer for 384 well microplates