

# Operation modes for Leica DM IRE2



## DRY and IMMERSION

The Leica DM IRE2 microscope is equipped with a switch function between the operating modes "Dry" and "Immersion" (IMM) to ensure straightforward, error-free operation.

This prevents

- dry objectives from being immersed in oil by mistake
- immersion objectives from being used without immersion oil by mistake.

## Changing the operating mode



The operating modes are switched by simultaneously pressing the keys "lower z position"  and "focus position"  on the control panel of the microscope. This means that immersion cannot be travelled to in Dry mode and dry objectives with a short working distance cannot be travelled to in Immersion mode.

To ensure smooth operation, immersion oil must be applied to all oil immersion objectives in the nosepiece that are to be used before you start work.

Contamination of the dry objectives is prevented by the fact that the objective nosepiece is always lowered before objectives are changed.



When switching from one operating mode to the other, please proceed as follows:

Starting in the DRY mode:

(Display at the bottom right in the LD display: D)  
Press the keys "lower z position"  and "focus position"  on the control panel of the microscope simultaneously to switch from Dry to Immersion.

The objective nosepiece is lowered and the message "Change Objective" appears in the display. The corresponding oil immersion objective is switched into the light path with the objective changing key (normally the upper objective changing key). From now on, only oil immersion objectives or objectives of the "Combined" category are travelled to. ("I" now appears in the LC display at the bottom right).

The procedure for switching to the Dry mode is analogous:


Again, press the keys "lower z position"  and "focus position"  on the control panel of the microscope simultaneously to switch from "Immersion" to "Dry".

The objective nosepiece is lowered and the message "Change Objective" appears in the display. You now have the opportunity to put a new specimen slide (without immersion oil) on the stage. Then, using the objective changing key, switch the appropriate dry objective into the light path (normally the lower objective changing key). From now on, only dry objectives or objectives of the "Combined" category are travelled to.

("D" now appears in the LC display at the bottom right).

To learn objective categories, see "Installing the objectives" (→ p. 48).

#### **Automatic lowering of the objective nosepiece**

In order to be able to operate the objective changing keys easily and without touching the stage in situations where space is difficult, e.g. if there are small object inserts in the stage and/or if the specimen plane is relatively high above the stage level, the objective nosepiece is lowered before it is rotated. The end position for this lowering (= lower z position  ) can be chosen by the user.

If the lower z position is not set, the objective nosepiece is lowered by the maximum possible distance.