# Delvotest® Incubator

Delvotest® is a test kit for the detection of antibacterial substances such as antibiotics and sulphonamide residues in milk.
For the operation of this test kit, an incubation step at 64°C is required.
The DELVOTEST® INCUBATOR (12 Volts dc 20 Watts) dry incubator with integrated thermometer and timer functions is for incubating ampoule presentations of the Delvotest® broad spectrum tests and the Delvotest® fast tests.

Connection: The incubator should be used indoor placed on a level surface and connected to the 12Vdc AC/DC power adaptor.
Connect the AC/DC power adaptor to the local current 115 or 230 Vac at 50 / 60 Hz. Car cord or 24Vdc converter for truck available on request. Verify country regulations on use of accessories while driving.
After switching ON the DELVOTEST® INCUBATOR, the pre-heating of the incubator will start, the red indicator LED will light and the display will show: [ PrE ] [ HEAt ] [brd] or [ PrE ] [ HEAt ] [FASt]. To switch from the [brd] mode (broad spectrum test) to the [FASt] mode (fast test mode) press "I/O" and "Program" together with "I/O".
All function keys are disable during pre-heating. After 5 minutes the indicator LED will start to flash, indicating that the temperature has come close to the set temperature of 64°C. For best Delvotest® results it is advisable to wait a further 5 minutes to allow better temperature stabilisation at 64°C.
The incubator is now in continuous mode and the display will show the actual temperature [64.X°C] / [cont] and is ready for use. For testing, operate Delvotest® according to product instructions.

Temperature readings and adjustments: When the DELVOTEST® INCUBATOR has been set at 64°C, temperature adjustments can be made during the continuous mode [cont] within a range of 63.0°C to 65.0°C. To re-programme the temperature setting;
- Press PROGRAM and TIME SET keys at the same time to increase the temperature.
- Press PROGRAM and START/STOP key at the same time to reduce the temperature.
(After approx 5 seconds the display will return to the continuous mode). In the metal heating block there are 2 additional holes for external thermometers for verification purposes. Ensure appropriate fit of the thermometer in this hole.
Contact your local DSM-representative if assistance is required.

Incubating precautions: The incubator must be used in a room with a constant temperature +10°C to +35°C and should not be placed near an open window or in a draught. Always ensure that Delvotest® ampoules are fully inserted, touching the well-bottoms of the incubator. In the event that further test runs are to be carried out on the same day, the incubator should remain switched ON. For best results, it is recommended NOT to put in new cold ampoules during a test run as this may lower the temperature.
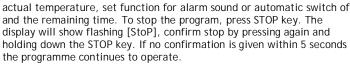
Error messages: During an operation the DELVOTEST® INCUBATOR may diagnose possible failures. Messages will be displayed whenever an error has occurred. The incubator will keep functioning. To restart the DELVOTEST® INCUBATOR from any programme, switch OFF (or disconnect) for at least 5 seconds. Contact your local DSM-representative if assistance is required.
The following messages can be displayed: [Lo t°] = Temperature is too low. (This is normal during pre-heating) or [Hi t°] = Temperature is too high.

Storage and transport: The DELVOTEST® INCUBATOR should be stored and transported dry at a temperature between 0°C – 50°C. Avoid freezing and strong mechanical shocks.

Cleaning: Only clean the DELVOTEST® INCUBATOR with a dry cloth or tissue. Do not use water or any other liquids.

## BROAD SPECTRUM

Procedure: To start the DELVOTEST® INCUBATOR programme (timer) press START/STOP key for 1 second. The display will start to show in cycles:



On/Off switch
Incubating wells (10x)
Display
Thermometer holes (2x)
Heating indicator
Keyboard

actual temperature, set function for alarm sound or automatic switch off and the remaining time. To stop the program, press STOP key. The display will show flashing [StoP], confirm stop by pressing again and holding down the STOP key. If no confirmation is given within 5 seconds the programme continues to operate.
When the DELVOTEST® INCUBATOR has been programmed for an alarm sound [Snd], the alarm sound only will be audible and the display will show [End]. To stop the alarm from sounding, press STOP key. This will also bring the DELVOTEST® INCUBATOR back to the initial starting menu (continuous mode). Pressing again on the START/STOP key will re-start the timer again with the memorised settings.
When the DELVOTEST® INCUBATOR has been programmed for an automatic power switch-off, a sound will also be audible and the display will show [OFF]. To stop the alarm sound (and the programme) press the STOP key. This will also bring the DELVOTEST® INCUBATOR back to the initial starting menu (continuous mode). Pressing again on START/STOP will re-start the timer again with the memorised settings. Memorised settings will remain in the memory after disconnection from the main.

The DELVOTEST® INCUBATOR has the facility to be switched OFF temporarily with the ON/OFF switch. For a full power OFF, disconnect the AC/DC power adaptor from the main 115 or 230 Vac. To restart the DELVOTEST® INCUBATOR from any program, switch OFF or disconnect for at least 5 seconds.

Alarm sound and automatic switch-off setting: During the continuous mode the DELVOTEST® INCUBATOR can be programmed to make an alarm sound [Snd] and/or for an automatic power switch-off [Auto] at the set incubation time. To programme the alarm sound or the automatic power switch-off: - A short press on the PROGRAM key activates programming and shows the memorised value.
- Subsequent short presses on PROGRAM key cycle between [Snd] for alarm sound and [Auto] for automatic power switch-off after set time.
- Memorise displayed setting by pressing and holding down the PROGRAM key for 2 seconds (buzzer sounds for 2 seconds while pressing). (After approx. 5 seconds the display will return to the continuous mode).

Time set programming: During the continuous mode, the DELVOTEST® INCUBATOR timer can be programmed to use the required time set for alarm sound and/or for automatic power switch-off. To programme the time set:
- A short press at on TIME SET key activates programming and shows the memorised value.
- Subsequent short presses on TIME SET key cycle between: [ 1.45 ] 1 hour and 45 minutes to [ 3.15 ] in incremental steps of 15 minutes after set time.
- Memorise displayed setting by pressing and holding down TIME SET key for 2 seconds (buzzer sounds for 2 seconds while pressing). (After 5 seconds the display will return to the continuous mode)

## FAST TEST

Procedure: The fast test program is made of two timers following each other. After inserting the ampoules in the incubator, press "Start/Stop" to start the first timer countdown. Once the time is elapsed, a "bip" sound is played. Press on "Start/Stop" to stop the sound. Add the test strip to the ampoule and press "Start/Stop" to start the countdown of the second timer. When time is elapsed, read the test result. To stop the program during any incubation, press STOP key. The display will show flashing [StoP], confirm stop by pressing again and holding down the STOP key. If no confirmation is given within 5 seconds the programme continues to operate. Note that stopping the program will bring back the Incubator in the continuous mode.

Time set programming: During the continuous mode, the timers can be adjusted by pressing on Program. Select the timer to be changed: T1 or T2 and press "Time Set" until the desired time is displayed. Press then a few seconds on "Time Set" to validate the new time.

**DSM**