Display messages

Messages	Explanations, causes and problem solutions
already used !	Cause: • The selected measuring head has already been started for a measurement and can only be used for a new measurement after the current measurement is finished and the measurement data completely retrieved. Problem solutions: • Select new and free measuring head or • Stop start or • Release measuring head (chapter “Maintenance - Release/reset”)
Set system clock !	Cause: Data backup battery was changed! Problem solution: Set the clock (see the chapter “GLP/Tools - Settings - Date/Time”).
defective !	Causes: The selected measuring head is defective. Please send it to WTW. Problem solutions: • Select new and free measuring head or • Stop start
No samples available !	Cause: There are no finished samples stored in the sample management. Problem solution: • Transfer the unfinished samples of the sample management to “finished” status. To do this, the measurement data of all measuring heads must be called up and evaluation and documentation of the measurement data of the finished samples performed. • If the measurement data of the measuring heads is not yet finished, no instant remedy is possible! The memory capacity limit of the instrument has been reached.

Messages	Explanations, causes and problem solutions
No active !	Causes: • No measurement has been started. • The measuring heads are placed at another location (e.g. other levels in the incubator, other incubators, further storage locations). • The measuring heads have no optical contact with the controller: - Distance too great, angular position imprecise - IR window of the measuring head averted from the controller - Shading by other objects. • Controller defective Problem solutions: • Modification of the distances or angle • Search other storage locations • Check controller • Test the measuring heads (see section "Requirements/Problems")
Cal test due on 18.07.97! (example date)	Causes • GLP is switched on • The test resource monitoring is due within the measuring time of measurement for the selected measuring head. • Date/time is not correctly set in the controller. Problem solutions • Use another free measuring head that has been checked • Start the due measuring head with the Cal test (see chapter "Check - Cal test") • Switch off GLP and start measuring head (if your laboratory practice permits). • Set the date/time in the controller.

Messages	Explanations, causes and problem solutions
Lack of memory possible ! Memory for 11  free ! Continue	Cause: This message is used as information in the standard BOD operating mode. There is a lot of sample data stored in the sample management. The memory is almost full. It is still possible to start a sample as a parallel sample start with 11 measuring heads (the number 11  used here is an example, possible numbers: 1...11 ). Problem solution, if necessary: • Erase finished samples: Chapter “GLP/Tools - Maintenance- Erase finished samples” • Alternative: Changing the instrument setting to automatic erasing of finished samples: Chapter “GLP/Tools - Settings - Memory - Erase: auto"
Memory lack ! No ready samples autom. erasable!	Cause: The instrument works with the setting, Erase memory “auto“ (automatically). The memory is full and only unfinished samples are stored in the sample management. The instrument can only erase finished samples automatically. Problem solution: • Transfer the unfinished samples of the sample management to the “finished“ state. • To do this, call up the measurement data of all measuring heads and perform the evaluation and documentation for the measurement data of the finished samples. • If the measurement data of the measuring heads is not yet finished, no instant remedy is possible! The memory capacity limit of the instrument has been reached.

Messages	Explanations, causes and problem solutions
Memory lack ! Erase finished sample/s!	Cause: • The instrument is working with the “manual“ setting of Erase memory. The memory is full. Problem solutions: • Transfer the unfinished samples of the sample management to “finished“ status • Call up the measurement data of all the measuring heads • Perform evaluation and documentation of the measurement data of finished samples. • Erase finished samples from the sample management: Chapter “GLP/Tools - Maintenance- Erase finished samples” Note: Only the finished samples in the sample management are erased.
undef. (Display in the curve presentation or sample statistics)	Causes: • The selected measurement range has been exceeded. • The sample filled was too warm. • The AutoTemp function is switched off. • The sample filled was very cold and has a low consumption behavior (smaller BOD value). • The system is not sealed (bottle internal pressure = atmospheric pressure). Avoiding the problem: • Select the correct measurement range (see WTW application report). • Pretemper the sample more precisely. • Switch on the AutoTemp function (only effective for measuring times longer than one day). • Check the system for leaks by means of visual checks: Are the sealing surfaces of bottle and measuring head clean and fault-free? Are there cracks in the sleeve, bottle or measuring head? • Perform “Cal test“ (see chapter “Check”). • Check the incubator temperature.

Messages	Explanations, causes and problem solutions
10 of 12 called up (sample message, no. is variable)	Cause: • Two measuring heads have not been found by the controller • The measuring heads are positioned at another location, e.g. other levels in the incubator, other incubators, further storage positions • The measuring heads have no optical contact with the controller: - Distance too great, angular position imprecise - IR window of the measuring head averted from the controller - Shading by other objects. • The missing measuring heads are defective Problem solutions: • Modification of the distances or angle • Search other storage locations • Search for and check measuring heads (see section “Requirements/Problems“)
0 of 19 called up (sample message, no. is variable)	Cause: • No measuring head has been found by the controller. • The measuring heads are positioned at another location, e.g. other levels in the incubator, other incubators, further storage positions • The measuring heads have no optical contact with the controller. - Distance too great, angular position imprecise - IR window of the measuring head averted from the controller - Shading by other objects. • The controller is defective. Problem solutions: • Modification of the distances or angle • Search other storage locations • Check the controller (section “Requirements/Problems“)

Requirements / Problems

Requirements / Problems	Procedure / Problem solutions
No or missing samples in the sample management	Cause: • You started samples in the operating mode „BOD Standard“. Then you switched over to the operating mode „BOD Routine“. Problem solution: • Switch the instrument to the operating mode „BOD-Standard“ (see chapter GLP/Tools - Settings - Operating mode).
At the beginning of the measurement, no measurement curves are displayed Measurement curves does not emerge from the origin	Causes: • The sample filled and started was too cold. • AutoTemp function is switched off. Problem solution: • Temper the sample more precisely. • Switch on the AutoTemp function (only effective for measuring times longer than one day).
No measurement curves are displayed although the measurement has already been running for an extended period of time	Causes: • No data was retrieved from the measuring heads. • The AutoTemp phase is still running (see the chapter ”AutoTemp function in greater detail“). Problem solution: • Call up the data of the measuring heads. See chapter “Call up all data“. • Wait for the end of the AutoTemp phase then start the evaluation.
Search for free measuring heads for a new measurement	Procedure: Perform the function “Show free  “ (see chapter “GLP/Tools”). The controller causes the free measuring positions to flash for 5 seconds.

Requirements / Problems	Procedure / Problem solutions
Measuring head unintentionally started for measurement Measuring head started with incorrect settings Measuring head is required for another sample	Problem solution The measuring head can be released again through the command Reset/release: Chapter “GLP/Tools - Maintenance - Reset/release ”. The controller guides you further through the operation. If only one measuring head is stored under the corresponding sample number (in the routine BOD operating mode, this is always the case), the controller automatically erases the sample in the sample management.
Search for the defective measuring head	Procedure: • Perform a measuring head reaction test (see above). A measuring head that repetitively shows no reaction to the test is defective. • If the defective measuring head cannot be established in this way, perform the measuring head check (see “Single check”). In doing this, each individual measuring head must be checked until the defective measuring head has been found.
A measuring head is missing or is defective. Requirement: To determine the corresponding sample	Procedure: Call up the function “Call up data” from the sample management for each individual unfinished sample. The corresponding sample can be determined by this. For subsequent error handling, see the chapter “Sample management - Call up data”.

Requirements / Problems	Procedure / Problem solutions
The precision and sealing of the system sample bottles plus measuring head should be checked	Procedure: See the chapter “GLP/Tools - Check - Cal test “
Measuring head check (single check) (To which running sample does the selected measuring head belong?)	Procedure: Single check method: menu “GLP/Tools - Check - 🌳 info” • The controller guides you further through the operation. • All single information on the state of the measuring heads is listed, i.e. the measuring head responds. • The check can be undertaken at any time without affecting the measurement that is running. • If no reaction at all can be determined, the batteries should be changed and the measuring head check repeated. • The measuring precision cannot be checked with this!
The measuring precision of the measuring head should be checked.	Procedure: Pneumatic test (PT) of the measuring head: see the chapter “GLP/Tools - Check - Pneumatic test”
Perform measuring head reaction test	Procedure: • Menu “GLP/Tools - Check - Show all 🌳🌳🌳”: • All optically attainable measuring heads must flash for approx. 5 seconds independent of their status. • The check can be undertaken at any time without affecting the measurement that is running. • This test only checks the reaction to commands. • If no measuring head reacts, the controller should be checked.

Requirements / Problems	Procedure / Problem solutions
Checking the controller	Problem solution: Controller info • See the chapter “GLP/Tools - Check - Controller info” All single information on the state of the controller is listed. • The check can be undertaken at any time without affecting the measurement that is running. • Perform the command: “Show all 🌳🌳🌳 “. See “GLP/Tools - Check - Show 🌳🌳🌳”. (The check is used in this case to test the IR interface.) All working measuring heads must flash for 5 seconds. • Perform a measuring head check - see the chapter “GLP/Tools - Check - 🌳 info” (The check is used in this case to test the IR interface). Here, a working measuring head should supply its status data. • Keyboard, display and signal tone should show the required reaction. • Check the function of the clock (prerequisite: clock is available). Switch off the instrument and switch it on again. Time and date each appear showing the current values. • Check RS232 interface (only required when using the WTW software, ACHAT OC): - Connect controller to your PC by means of the interface cable AK540/B. - Switch on controller and start the PC program, ACHAT OC. In doing so, the PC program checks the RS232 interface.
Incorrect time display on being switched on	Cause: • Data backup battery has been changed! • Summer/winter time change has taken place. Problem solution: Set the clock (see the chapter “GLP/Tools - Settings - Date/Time”)

Requirements / Problems	Procedure / Problem solutions
The IR printer does not react	Causes: • Printer is not switched on. • The printer has no optical contact with the controller: - Distance too great, angular position imprecise - IR window of the measuring head averted from the controller - Shading by other objects. • Printer batteries are empty. • No paper or the wrong paper is loaded. • Printing is not possible in the operating state of the controller selected. • The printer or the controller is defective. Action: • Switch on the printer • Establish optical contact • Check or change the printer batteries. Please read the operating instructions of the printer. • Check in the operating manual of the controller whether printing is possible in the state selected. Note: During printing, the message “Printing active” always appears on the display.

Power supply / Battery status

For battery status messages, see the chapter “Power supply”.