

TECO GmbH Germany

Coatron A6 Plus

Software History File

V1.03.06a (Build-53) 29. Jul 2020

Recommended TECAM Version: **V7.08.8 (PRO/PROLIS)**

Software changes

1	System self-rebooted occasional after a missing liquid level (out of liquid), instead of returning to main menu. (Minor bugfix for 1.07.04b)
2	System simulator mode removed after ROBOT ERROR message.

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible.

V1.03.06a (Build-52) 19.Dec 2019

Recommended TECAM Version: **V7.08.6 (PRO/PROLIS)**

Software changes

1	Backwash of rinse tank filter during startup. This regenerate the filter
2	High speed wash cycle during boot up. This allows to detect a leaky valve. If you see a lot of air bubbles, then valve must be replaced
3	Wash sample out of needle probe inside of the dome. -This wash needle probe inside+outside -This extend lifetime of valve -This reduce consumption of rinse tank

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible. After update you may be asked to reset all test protocols and calibration data to factory default. You can accept or reject, if you like to continue with EEPROM data before update.

V1.03.05d (Build-51) 12.Nov 2019

Recommended TECAM Version: **V7.08.5 (PRO/PROLIS)**

Software changes	
1	Default protocols changed for -PS: (Protein-S, adapted to new assay TEClot PS, A0601), -VWF (von Willebrand Factor, adapted to immuno assay) -DABI (Dabigatran, adapted to TECLOT DOAC (anti-IIa) -AF10 (anti-Xa, adapted to TECLOT DOAC (anti-Xa)
2	Systems reboots automatically after message "ROBOT ERROR"

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible.

V1.03.05.d (Build-50) 25.Mar 2019

Recommended TECAM Version: **V7.08.4 (PRO/PROLIS)**

Software changes	
1	Since last version, there were occasional barcode reading problems observed like Patient-ID is displayed and transmitted to TECAM with missing characters. Fixed now.

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible.

V1.03.05.c (Build-49) 13.Feb 2019

Recommended TECAM Version: **V7.08.2 (PRO/PROLIS)**

Software changes	
1	Self-Reboot during measurement removed (Bugfix for 1.03.05b)
2	Default protocol of DD changed Old: 10µl sample + 30µl RB + 30µl Latex Start=25s Stop=120s Mix=No New: 10µl sample + 40µl RB + 30µl Latex Start=60s Stop=180s Mix=Yes Reason: Poor linearity and accuracy

3	D-Dimer Auto-calibration changed: Standard-2 is not pre-diluted anymore, but pipet from P01 with half sample volume. Reason: Poor linearity and accuracy. Sample dilution with IBS buffer have negative effect to linearity and accuracy.
4	Worklist Mode=QC introduced This mode is intended to check the quality of system. - Place P01 normal control + FIB reagent - Run Worklist MODE="QC" - After 8 repeats, system calculates mean + C.V. and status of QC x if C.V. of (s) is > 7.5% then there is a problem with pump or needle x if C.V. of (E) is > 7.5% then there is a problem with optic or cuvette or XYZ x if mean (E) is < 0.030E then there is a problem with cuvette adjustment
5	In general the analytical performance of aPTT, Fib,DD, AT, FDP, is improved to achieve significant better C.V. values especially for abnormal samples
6	Replacement of rinse tank is now integrated within routine workflow. A change to service menu is not required anymore. Transmit a worklist with TECAM. System will warn before start, if rinse level is low. Now replace the rinse tank and confirm. Afterwards system will start the worklist.
7	System will start always with a new cuvette, if orders are cuvette wise with TECAM (worklist mode=CUV). This ensure best throughput and save a lot of rinse solution.
8	New firmware supports already Code20 tickets (required for cuvette or rinse barcode activation) , which were coming in year 2020

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible. After installation all test protocols will reset to default.

After installation D-Dimer must be re-calibrated new. All other test setup (PT,FIB,..) can be obtained from previous calibration.

V1.03.05b 6.Jul 2018

Recommended TECAM Version: **V7.06 (LITE/PRO/PROLIS)**

Software changes	
1	Unit reflex testing , if result is 25% higher than max. calibration point Before the trigger value was fixed at absolute levels like 3000ng/mL.
2	Carryover of AT-buffer removed. Assay Techrom AT C1000-010 contains a heparinized buffer to prepare a 1:100 sample dilution. If the AT-buffer is not wash out of needle carefully, then a consequent TT measurement will result in "+++". (Note: On Coatron-A instrument the liquid AT reagent (C1010-020) is intended. No carryover is observed , because the sample buffer is without heparin)
3	Worklist Setting Clean = MIN or MAX removed. System works now always in mode MAX, which forces a wash cycle between sample to sample.

4	OEM=6 (China) specific changes -Default protocol of AT changed to C1000-010 (4PAT+156BUF-135CLR+ 40R1+40R2)
5	Minor fixes (reported bugs below are very rare) - DD reported ">120" instead of 0ng, - TT reported 0s instead of >90s - System pipet sample in second cuvette even if no cuvette is available. - System pipet reagent in wrong sequence, if sample was skipped before.

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible.

V1.03.05a 13.Mar 2018

Recommended TECAM Version: **V7.04 (LITE/PRO/PROLIS)**

Software changes	
1	Worklist mode SEL is removed, New worklist mode ECO This mode save upto 30% reagent and rinse, but throughput will reduce upto 50%.
2	Carryover removed, Sometimes FIB reagent is pipet before aPTT step. This cause carryover of FIB into aPTT cuvette. The aPTT results can be 25% shorter in worst cause. Fixed now.
3	Airbubble and spike filter added to measurement, In worst case a spike on signal can cause +++ or false short results. The software filter remove now any spikes
4	Integration into new TECO ticket system, The instrument require every 50.000 tests a service. The interval must reset by a barcode. The barcode is obtained from www.teco-reg.com For login the SIN and PIN is required, which is now showed by the instrument during bootup or print system report With TECAM V7.04 the login can be done automatically
5	AnyCode is disabled with 1.1.2019 (applied in China)
6	Needle dispense waste now outside of wash position, The membrane inside of wash positon often blocks the drainage and must be replaced each 50.000 tests. This is not necessary anymore.
7	New chromogenic tests based on anti Xa or anti IIa to monitor new anticoagulants (DOAC) like LMWH , Apixaban, Rivaroxaban, Edoxaban or Dabigatran. The new assays kits for anti IIa and anti Xa are currently under validation and soon available. Additionally aPTT allows to input calibration curve for Heparin monitoring

8	T-Corr setting is now transmit to TECAM V7.04, This allow much better reaction curve analysis on TECAM side
9	AnyCode tickets are disabled with 1.1.2019
10	Mirror Print Print data like system report or setup test are sent to TECMA, if connected.
11	Minor fixes (reported bugs below are very rare) • Needle sometimes crashed into cuvette • Needle sometimes crashed into sample microtube • Cuvette moved when needle is inside during XYZ adjustment • Some last result is not transmit to TECAM • Curve transmission to TECAM is sometimes with wrong deadtime • Skip of orders can cause false volume in cuvette

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible.

V1.03.04a 11. Aug. 2017

Software changes	
1	Default protocol of aPTT changed T-Corr: old=+15% - 6s new=0
2	System information (name, S/N, SW) added to print of SETUP TEST
3	Lipemia patch. PT + aPTT is now working with sample up to 500mg/dL Triglycerides. Samples with higher concentration will be measured as “+++”.
4	Receive “Hi-Sense” orders from TECAM V7.02. If order is marked as hisense, then measurement is performed in high sensitivity mode. This is very helpful for all “+++” resul
5	PT-Unit: “R + INR” introduced

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible.
An update of TECAM PRO(LIS) to V7.02 or later is required to activate Calibration Lot Management

V1.03.03 16. Mar. 2017

Software changes	
1	INIT SCREEN allows now to reset service interval
	0 EXIT
	1 INIT TEST
	2 INIT ALL
	3 RESET SERVICE
2	Function „ADJUST XYZ” without need of optic shield.
3	Negative D-Dimer curves are reported as “0” instead of +++

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible. An update of TECAM PRO(LIS) to V6.06 or later is required to activate Calibration Lot Management.

V1.03.02 07. Feb. 2017

Software changes	
1	Speed Pack increases throughput up to 30%
2	Calibration Lot Management:
3	In workmode “EV1” system print additionally mean and CV. value

Calibration Lot management (TECAM V6.06 required)

Working with different reagents LOTs is now very convenient.

- Setup is automatically transmitted to TECAM software, if new calibration is entered or any result is transmitted
- Setup is automatically loaded from TECAM software, if vial barcode is scanned within menu SETUP TEST or ANALYSIS/REAGENT BARCODE.

Speed Pack

Throughput of PT, aPTT increased by 30%

Clean=MIN	Mode= BAT (Routine)		Mode= EV1 (Research)	
	V1.03.01	V1.03.02	V1.03.01	V1.03.02
PT	271	320	492	520
aPTT*	147	160	180	240

* aPTT incubation + maxtime = 120s

By following measures:

The intensity of cleaning can be set in menu "ANALYSIS/NEW WORKLIST/CLEAN=MIN or MAX". With minimum cleaning the throughput is increased and consumption of rinse and cleaning solution is reduced. The price is sample carryover below 5%, which is acceptable

Speed pack software changes		CLEAN=MIN (max speed)	CLEAN=MAX (max accuracy, default)
1	Sample is clean out of needle with next sample. No rinse or cleaning solution is used. The observed carryover affect result less than 5% at a significant win of throughput.	Yes	No
2	PT, aPTT, CaCL, IBS buffer is clean out of needle with rinse solution only. Additional clean solution is used, if test in cuvette switch.	Yes	Yes

Update and Compatibility Information

This firmware can be installed over all instruments. The LIS Interface is fully backward compatible. An update of TECAM PRO(LIS) to V6.06 or later is required to activate Calibration Lot Management.

V1.03.01 3. Oct. 2014:

First release

An update of TECAM software to V6.04 is not required

You can download the latest setup from <http://ftp.teco-gmbh.com>