

IQ-COMPEO+/Flytec 6030 SW

SW Release Notes

English

V 3.33 from 21/9/2011

- Near thermal tone active only if the GPS Speed is bigger than 10km/h. This overcomes the problem with the near thermal tone after landing.
- Bugfix: In an end of speed cylinder with concentric goal line, when approaching the end of speed cylinder, the optimized waypoint will be tracked dynamically now, see below.
- Default "E" for a new waypoint in a competition route.
- Autozoom in a cylinder with goal line will remain, until the goal line has been crossed.
- Autzoom near the startcylinder will only become active 30s before starttime.
- Right arrow in the map mode hides all not used waypoints in a route. This setting will remain now, even with auto-zoom and when you switch to the Vario screen. A new brief press on the right arrow key displays the waypoints again. Turning off the device clears this setting and it will again show all waypoints.
- The bug with entering the airspaces manually could not be found until now.
- Amendment: From version 3.32m on, all SD card including SD HC Card with capacities over 2GB can be used.

V 3.32m from 8/8/2011

- Bugfix with copying routes into the competition route. The attributes will be saved now into the EEPROM.
- • Known Issues (Will soon be resolved):
 - Optimized route: In an end of speed cylinder with concentric goal line, when approaching the end of speed cylinder, the optimized waypoint will be not dynamically tracked
 - If the last waypoint has been defined as a line, this attribute will remain active, even if you delete all route points
 - If you enter manually an air space, and leave the input menu with ESC, it is possible that the airspace database will be corrupted. The problem ist then, that the display freezes as soon the instrument has GPS reception,. Solution: Main setup menu > Clear/initialize memory -> Init CTRs the CTR mememory space will be freshly formatted. Then you can transfer the airspaces again with Flychart to the device

V 3.32l from 29/7/2011

- Bugfix with Startcyl. ENTER in opt.C-Route
- opt. und normale C-Route are similar during entry of the route. With longpress "Route" and F1 the mode can be chosen before start.
- Userfields in Mapmodus for everybody. With the left arrow key the field can be chosen. With the up/down arrow the field can be selected.
- Userfields in Autozoom Modus can be altered in Menu -> Main Setup Menu -> Settings -> Auto Zoom C-Route -> left, middle, right

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- The default values Enter and 400m will be set if a route is copied into the competition route.
- Bugfix in angle calculation in the competition route.
- Default values for the settable Userfields after a firmware update.

V 3.32h from 13/7/2011

- Opt. C-Route with new algorithm and additional acoustic start time elapsed
- No additional attributes (E, X, L) with normal competition route. The normal competition route should react like before.
- No reserved characters (!\$, \^~) according to FAI in text fields
- No starttime in the status row
- Autozoom 30s before start
- Userfield Speed to start SpdStCyl
- XTE is calculated to the track from center to center as before.
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V 3.32e from 1/04/2011

- Competition route will be automatically deactivated after the last waypoint (Line or radius) is reached.
- BugFix in near thermal tone
- Additional date field in \$FLYSEN
- Acoustic warning (high pitch - low pitch - low pitch) if FLARM userfield is incremented by one. The instrument cannot distinguish if the the new member was already recognized before. The sound sounds also when the same FLARM partner faded away is is recognized from new. In the info page there is a short warning text.
- FLARM warning can be switched on and off in the FLARM menu -> *Main Setup Menu -> Instrument Setup -> Flarm -> Acoustic Warning -> Yes*
- FLARM Hardware (HW) und Softwareversion (SW) is visible in the lower part of the menu -> *Main Setup Menu -> Instrument Setup -> Flarm*

V 3.32b from 15/03/2011

- Near thermal tone pulswidth adjustable in -> *Main Setup Menu -> Settings -> Acoustic vario -> Near thermal tone -> Cycle 10-50%*. 10% is a short beep with the same frequency as the normal lift tone. 50% is similar to the normal vario tone.
- Bugfix in Autozoom. If zoomed out from the maximum 0.1km, it remains on this zoom level.
- Every normal waypoint can be defined as Enter or Exit. Default is Enter. This solves the problem with three concentric waypoints on the same position where first the inner circle has to be reached, then the outer circle has to be leaved and then the second inner circle.

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V 3.32a from 10/02/2011

- Bugfix in goal line. In case of roughly north south oriented goallines it could happen, that the WP-reached sound was given too early e.g. before the goal line was reached.

V 3.32 from 27/01/2011

- Automatic zoom near an waypoint for better orientation with a scale of 0.1km.
Attention: In this zoom level only the route, waypoints and the track are visible. No airspaces are displayed!
- New menu topic -> user settings:
 - Full autozoom from the main page or in the map page,
 - map only. Autozoom only in the map page
 - Off: No autozoom.
- A new optimized waypoint will be calculated if the equation (Crosstrack error) divided by (Distance to radius) bigger than 0.2 is true. The shortest recalculation cycle possible is 15s.
- Improved SMS function via DUN to a mobile phone.

V 3.31h from 22/12/2010

- Optimized competition route. See separate description: "Optimized Competition Route"
- Bugfix. Scale in the map screen corrected
- NMEA RMC sentence two extra commas added for magnetic variation, but without content
- New NMEA sentence \$FLYSEN: See separate definition in "Bluetooth and SMS Setup"
- suppression of the peak values for the log book for 10 seconds after the flight recognition. This is a workaround for the error with the Vario - peak at the flight recognition. The error itself could not be found, but with this change, the peak values are not entered in the logbook.
- Course-up display in the menu -> Setup Main Menu -> Settings -> Map orientation. The orientation of the map is accurate to one degree when the new calculation was invoked. The direction of the little arrow for displaying the track is approximated and in 45 ° increments. The course up display is calculated every 30 seconds, or if the track is running out of the picture, or after zoom or after a brief press of the right arrow button in map mode.
- Near tone thermal. -> Main Menu Setup -> User Settings -> variometer acoustics -> Near thermal threshold. This is a tone with changing pitch depending on the vario. The continuous tone with a volume one level lower than the normal vario sound can be heard between this thermal threshold and the rising acoustic threshold and if a flight recording is active.
- New User Field "Speed to startcylinder". This field shows values when the start time is negative, and if the calculated optimum speed is less than 200km/h. Otherwise two strokes "--" are displayed.

V 3.30y from 28/7/2010

- GPS initialisation changed due to new GPS module lot.

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V 3.30t from 1/7/2010

- The last waypoint in a competition route will be interpreted as goal with possible goal line. After finishing the route, the recording rate in this last waypoint is 1 second to improve race times in case of goal lines.

V 3.30r from 14/6/2010

- FlyLink set to 8Hz
- FlyLink change command for vario output 10 ms increment for duration

V 3.30p from 4/6/2010

- Bugfix rare freezing during Bluetooth NMEA Output
- Bugfix in XML file for waypoints and routes. <\name> und <\desc> changed
- Output of special NMEA string on UART 4 für special purposes.

V 3.30o vom 12/5/2010

- Flarm Userfield shows „-“, when FLARM disabled
- Bugfix reading *.gpx Data from GPSDUMP and CompeGPS. Name and description from Flychart are different than in GPSDump and CompeGPS.
- Wps and Routen can be stored as 6030_1.gpx, 6030_2.gpx....
- „no card“ warning during storage of IGC files on SD Card if no card is present.

V 3.30m from 14/4/2010

- New Menu SD-Card
- Export of flights on SD Card. The SD Card must be formatted with FAT or FAT 16. Therefore maximum size is 2GB.
- Export and import of waypoints and routes on SD card in format *.gpx.

V 3.30j from 23/3/2010

- New FLARM menu with FLARM on/Off and programming mode (transparent mode)
- New release code generator
- Bugfix rare freezing of the display and keyboard functions in FLARM mode.

V 3.30b from 24/11/09

- New SW package FLARM added. This needs additional Hardware.
- New userfield FLARM: It shows the number of received FLARM instruments nearby. The reception of another FLARM means not a critical situation.

V 3.30 from 11/11/09

- New handling of the compass rose.
Empty compass rose with active bearing arrow showing towards up direction in case of no GPS reception. The bearing arrow should show, that a waypoint or route is active.
Compass rose north up and active bearing also north up in case of GPS speed below 3 km/h.

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- Faster recognition of nearby CTRs in case that the instrument was switched off and on in the same region.

V 3.29o from 21/10/09

- Bugfix EEPROM write cycles. The number of write cycles is reduced now by factors to optimize the EEPROM access. This should reduce problems with the so called "memory problem".
- Bugfix CTR recognition: CTRs which have been far away were in the list with distance 0.
- Acoustic CTR Alarm on/off -> Main Setup Menu -> Settings -> CTR Alarm.
- New info page with nearest CTR's. This page will be invoked with the key and shows the three next CTR's. The next CTR is checked every second, the second every 20 seconds and the third every 40 seconds. All other CTR are checked according to the CTR list, every second one CTR.
- The CTR alarm in the info line at the bottom is reduced to CTR 0.00. The name and the info line of this CTR is not displayed anymore, because this information is visible on the new info page.
- If the SMS is active and a valid connection via Bluetooth to the mobile phone network is established, function key F1 is „Send SMS“. With this function it is possible to send an SMS manually e.g. to inform someone else where the pilot has landed.
- GPS type is displayed in the Startup screen
- Automatic Switch off after 30 minutes with no GPS reception or 30 minutes after end recording if the flight analysis page remains.
- Bugfix in flight analysis. A1 and A2 were wrong, if part of the flight was below sea level.
- Bugfix in flight recognition. An erroneous jump in altitude gave excess numbers of vario in the flight analysis. It is not clear if this change eliminates the problem completely. Please give feedback if you see excess vario numbers in the flight analysis again.

V 3.29d from 3/8/09

- Fastrax Module running. Automatic recognition of GH-81 or Fastrax
- FLARM Debugversion working
- Bugfixes SMS via Bluetooth

V 3.28y from 01/7/09

- Fastrax with SiRF protocol. FLARM Timing not yet implemented
- Bugfix freeze after CTR and Bluetooth settings

V 3.28w from 30/4/09

- Stable version with Fastrax, Fastrax remains switched on in Menu
- Bugfix Scale in Map-Mode in the flight analysis,
- Recording intervall 1s possible again.

V 3.28p from 23/03/2009

- Setting of Smoothing und Dynamic Index of the GPS-Module in Factory Settings

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- Bugfix vario jump in case of start recording
- First Flylink functions for internal tests
- Passive Bluetooth Pairing
- Bugfix in route entry
- Acoustic CTR approach signal
- Displaykontrast +-1V for new LCD types (Factory settings)
- map scale units changed to even numbers
- Unit of sink tone threshold changed.
- New Userfield "QNH inHg".
- Sinkalarm up to -12.6m/s .
- After the last waypoint in a competition route, the last waypoint remains active (goal line function)

V 3.28k from 23.10.2008

- New accutype Golden Power 2100 settable in the instrument settings
- Bugfix Priority in IGC file with real time clock settings (time jumps in IGC file)
- Bugfix Reset- Sequence in differential pressure sensor (pitot sensor)
- New sentences in communication protocol : waypoint attribute, Comp-Route radii, read out of flight analysis page values. See document "Interface definition 061008.pdf"
- Battery monitoring in Menumode
- Bugfix in route setting (Xxxx Route)
- Universal LCd temperature parameters in Factory settings
- WP to WP-Distance in route menu visible.
- New Userfield: CylArrival

This new userfield "Cyl Arrival" shows the predicted time difference of arrival at the startcylinder.

$\Delta t_{Pr edictto cyl} = t_{Start} - t_{actual} - \frac{Dist_{Startcyl}}{BGSpeed}$ During lift, the time is calculated with the best glide speed.

$\Delta t_{Pr edictto cyl} = t_{Start} - t_{actual} - \frac{Dist_{Startcyl}}{GNDSpeed}$ During glide to the startcylinder, the time will be calculated with the actual GND speed.

Before start time, this time will count up from minus (black on white). As soon as the pilot can leave his actual position, the value will cross zero, become positive and turn into white on black background. During glide to the startcylinder this number can become positive or negative, depending on the actual speed. But it should be around zero.

If a pilot decides to thermal longer and to fly with higher speed to the startcylinder, he can wait a certain time, then leave the thermal. During glide he must have a look onto the starttime and the time to startcylinder. Time to startcylinder should be around zero.

This field is only possible for the startcylinder, because it needs the starttime.

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V 3.28a from 7.8.2008

- New Userfield Alt GPS

V 3.28 from 14.7.2008

- Storing of Zoomfactor
- Bugfix Starttime near the UTC date line. Calculation only with local time.
- Start screen with language choose
- Display of userfield Race Start changed. Normal display before start. Inverse display after Start.
- Corrected userfield names RaceStart und GLZ SollWP (Only German)
- Order of the userfields during readout changed. ⇒ Backwards compatibility for Flychart.
- NMEA via Bluetooth. \$GPGGA Sentence alternating with \$GPRMC. Simplifications in GGA: DOP always 3.5, Ellipsoidal separation always 0.0
- New Userfield Distance to startcylinder
- New MC indicator and Page indicator with bigger font.
- New Default Settings for Userfields
- Bugfix with CTR -Radii: of 65 km or more, plausibility check of the received message from the PC
- Bugfix. Bluetooth module draws too much current if disabled
- Averaging of the battery level (10s)
- No Recording-Start, if manual recording and menu mode.
- "CONF"- command from Flychart ignored if recording is active.

V 3.27a from 21.5.2008

- New Userfield Time to Takeoff "StartTime". +/-60 min with inverted display

V 3.26 from 16.5.2008

- Bugfix: Problem with invalid B-records at the end of the IGC File solved. Improved handling of start/stop/ signature calculation. .
- Hungarian language added
- Bugfix GPS altitude below sea level.

V 3.25l from 9.5.2008

- Bugfix: Menu topic removed, which could cause a freezing: Main Setup Menu -> Settings -> Speed -> Pitot Offset

V 3.25i from 1.5.2008

- Improved Batterie Check
- Bug fix: Improved initialising sequence of the A/D converter. Solves the problem with wrong altitudes during instrument startup.
- No flight recognition with only the pitot speed. Flight recognition is only with possible with more than 10km/h GPS Speed for at least 60s or at least 30m Altitude difference within 60s.
- Manual flight recording (Always On) delayed by 2 minutes. Therefore it is possible to make adjustments during 2 minutes after switch on.

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V 3.25c from 15.2.2008

- Bugfix in Alt a. Goal. In special occasion it could come to an overrun in the calculation
- Starttime near the UTC date border. With an additional check it would be ensured that the start timer is within +- 12h

V 3.25a from 28.1.2008

- Bugfix in Simulation. Ind. Speed instead of true Speed in Simulation
- Bugfix. 2 „empty“ keypresses in 5 Userfields

V 3.25 from 11.1.2008

- Message in case of wrong software download.
- Small changes in menu text.

V 3.24 from 9.1.2008

- Vario Lift threshold again in Menu Settings -> Acoustic
- The lift threshold in the Factory settings is now an offset to the Vario lift threshold.

V 3.23d from 7.1.2008

- 4 Userfields with bigger fonts
- Bigger Arrows in compass

V 3.23c from 30.11.2007

- 7 Userfields with big letters
- Default Settings acoustic filters to 0 (Old 5020 setting).
- Bugfix in SMS-Bluetooth

V 3.23 from Nov. 30.2007

- Filter setting in 5 steps. Detail settings are possible only in factory settings or with Flychart .
- Set waypoint of the actual position with long press WP and then Add Wayp. This is possible in every condition (During flying, in a Route in normal mode)
- Battery threshold für segment 8 reduced.
- Flight date derived from the first valid fix in the IGC file.
- GNSS Alti set to 0 in case of 2D fixes
- Baro Alti is based on 1013.25hPa
- Alt1/Mrk doesn't save a Waypoint in the waypoint list anymore. Instead it sets an E record in the IGC file
- Bug corrected in input of south coordinates
- Units as infor in speed in simulation.
- SMS-Bluetooth function activated
- Reset of the BT-Module after pairing
- Bugfix in drawing circles of CTR's in the map mode.
- Polare table increased to 250 km/h
- Additional characters in Info removed.

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- User pressure offset for the correction of the pressure sensor

V 3.21 vom 28.9.2007

- GPS-speed average instead of actual value for termination of the flight recording
- BugFix of ODAC register (internaly)
- Info key in the map mode brings up a new page with the full information of the next 3 CTR's
- Right key in th emap mode toggles not active waypoints in the map mode on or off
- Bug Fix missing segments in the vario dial
- Bug Fix Black background in userfield Alt. A WP during climb.

V 3.20 vom 24.9.2007

- Bugfix. The instrument could freeze if the flight memeory was more then 2/3 full and a competition route was active.

V 3.19 vom 3.9.2007

- Userfields order changed: **Attention:** Is is mandatory to use only Flychart 4.52.19 or higher after update to Version 3.19
- Wait fro switch off prolonged to 7s
- No Beep during switch off
- Switch on time and Battery check time prolonged by another 2s. Serial Numer in a bigger font to ease the reading for official observers
- Plus / Minus sign in map vario smaller
- Speed offset (to correct influence of the slower speed unde rthe wing) like in the 5030
- Additional userfiled A1 in ft,
- Daytypical climb in grey instead black
- Sound volume with double beep to drain internal capacitor
- Battery bar bank 2 in black

V 3.18 vom 23.8.07

- Validity check of waypoints during transmission from PC. Invalid signs will be converted to spaces
- The CTR's will not be deletes anymore with the command "Del all WP and routes"
- Calibration choices moved to factory settings
- Bugfix with black backgrounds of userfield titles
- Switch on delayed.

V 3.17 Release Version Testunits

All important functions implemented. Release version for first test pilots

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V 3.07 vom 5.6.07

1. Std 00 in B-Record
2. Opt,. SW-Pachkages
3. CTR increased to 300
4. Bugfix weird textes in opt. SW-Package
5. TAS missing in IGC
6. SpeedDiff wrong
7. Timing switch off changed, but there ar still some stripes visible after switch off
13. Acoustic, 25% changed, Volume change depending on speed
- 21 Key Info