

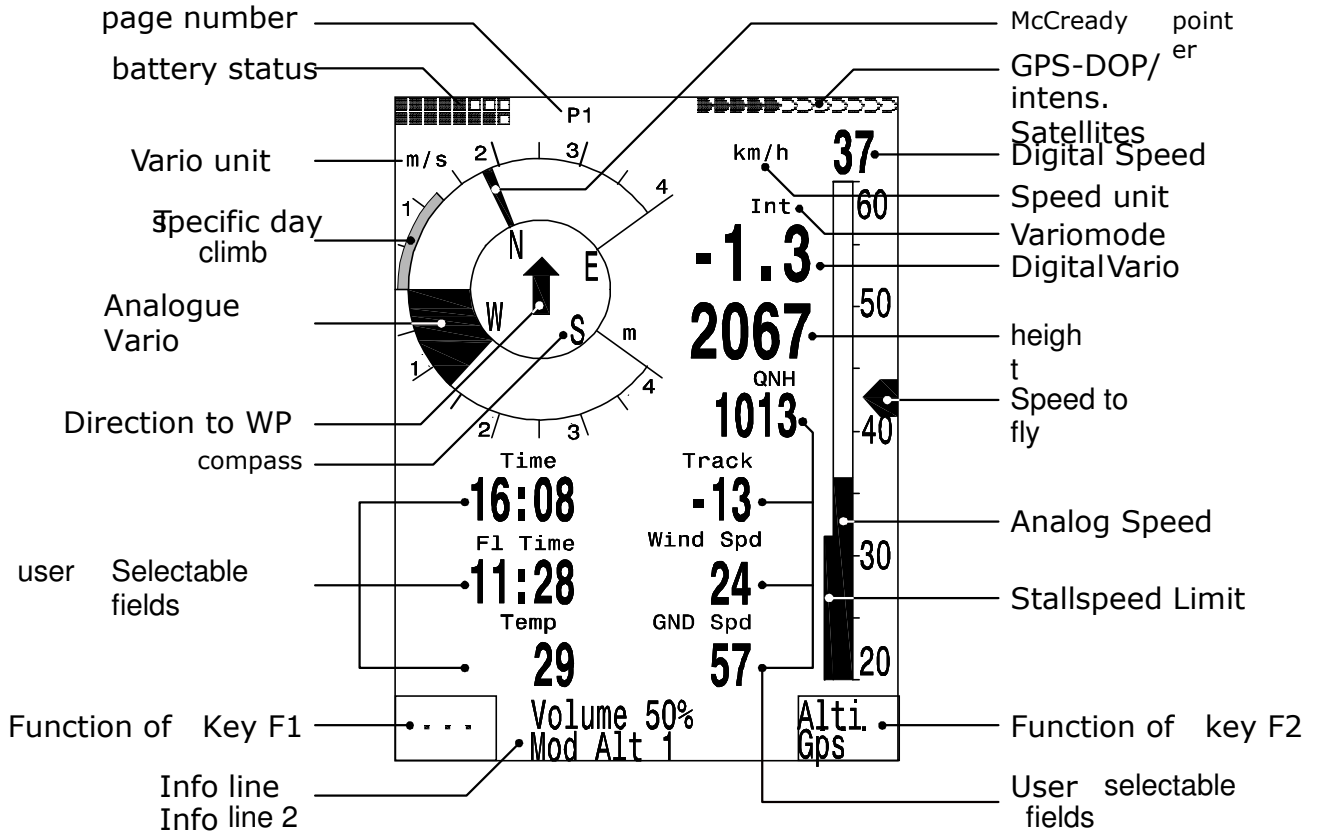


## Short form manual

### **IQ-Compeo+ Version 1.0**

**BRAUNIGER** Flugelectronic GmbH  
Dr.-Karl-Slevogt-Str.5 D-82362 Weilheim/Germany Tel. +49 881 64750  
[info@brauniger.com](mailto:info@brauniger.com) [www.brauniger.com](http://www.brauniger.com)

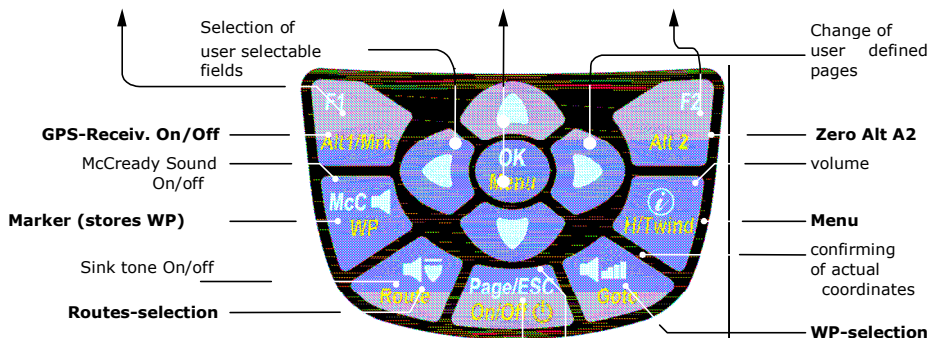
### 1.1 Keypad and summary of display screen



Arrow key functions in normal mode

INFOFELD at Display

Nxt	↓	----	QNH/Gps
Fnc	↓	Mod A1↑↓	SET0
	↓	Mod A2↑↓	SNK OFF/ON
	↓	S.Thr -0.8	Man Wnd
	↓	HT auto	

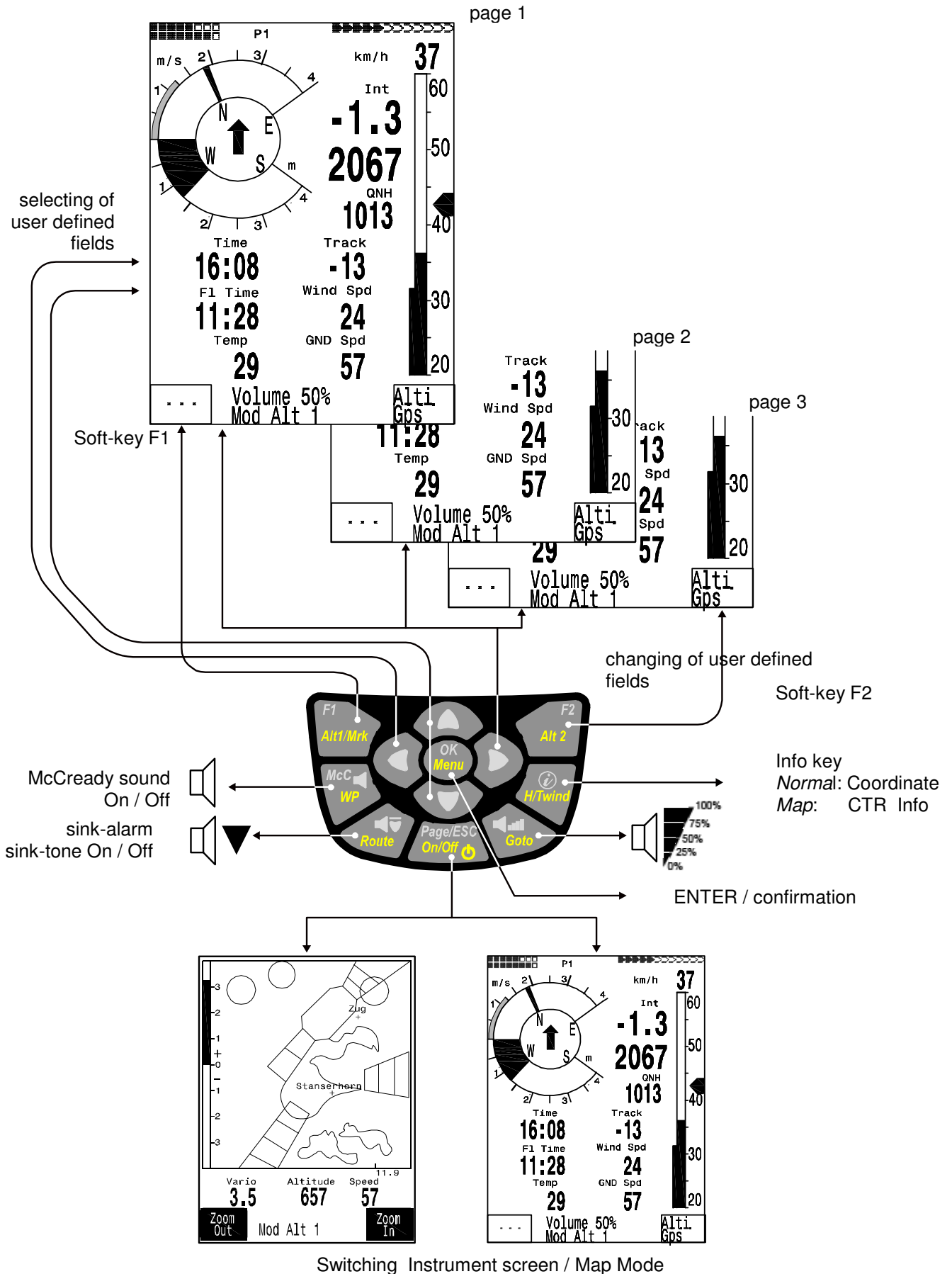


Display option :  
Instruments / GPS-Map  
at Menu mode  
1 Step back

on/off Switch  
(off=keep pressed for 3 sec.)

Standard fonts = short pressing  
**Boldface fonts = long-pressing**

Display indications defined by user



## IQ-COMPEO+ Switch-On and Off

The unit is switched on by pressing the key "Page/ESC On/Off ". To prevent inadvertent switch-on, it has to be confirmed after the display message „*really switch on ?*“ by pressing the key " OK ". For some seconds shall appear general data, such as serial no., pilot's name, SW-version, date, aircraft, and also the size of available memory for storage of waypoints and CTRs (EEPROM). For switch-off you need to press the same key during 3 seconds and to confirm the display question "*really switch off ?*" by pressing "OK". After ending a flight, the calculation of the digital signature can take up to 2 minutes. Please wait until the message „*Generating Digital Signature*“ disappears and press once more the key Page/ESC On/Off.

## 1.2 User selectable Fields

In the lower display part beside the compass rose there are 7 user selectable fields which can be used to the pilot's choice. In total about 27 selectable measurement data are available. **All user selectable fields can be set comfortably on the PC by use of the freebie PC-Software Flychart 4.52 and are transferred via the PC-interface to the instrument.** In order to assign a field to a certain measuring press the key ◀. Explanation of the respective display is provided with a black bar. Repeatedly pressing the ◀ key switches to the next field. The ▲ or ▼ keys enable you to assign for each field the following measurements:

**Caution:** For security reasons it is not possible to change the assignment of user selectable fields during flight.

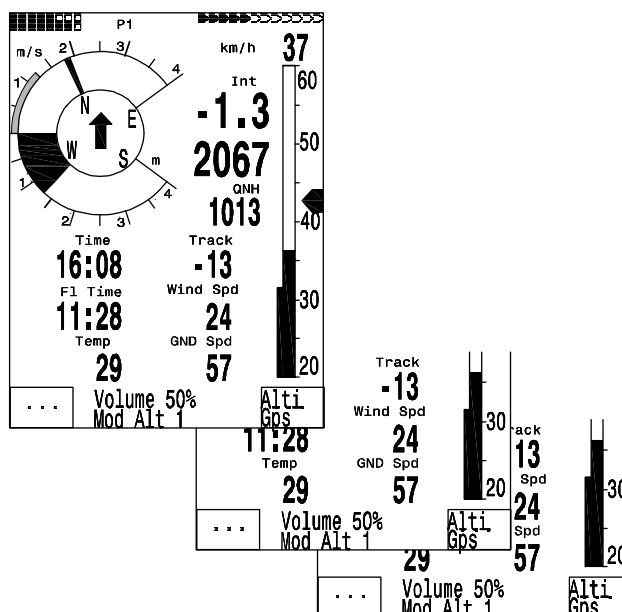
	Display remains empty
Time	Time of Day
Flight time	Flight time since take-off
Vario	Digital Vario
Alt 1	Absolute altitude
Alt 1 ft	Absolute altitude in ft
Alt 2	Reference altitude, may be set to 0 user-defined
Alt 3	Cumulated gain in height during the flight
FL (ft)	Flight level in feet. Not alterable
QNH (hPa)	Air pressure in Hektopascal
GND speed	Speed over Ground * (= GS)
Air Speed	Speed through the air
Wind Speed	Wind Speed *
Spd-Diff	Wind component (Groundspeed – True Air Speed) *
Track	Flight direction (Course) *
Bearing	Direction to selected Waypoint *
XT Error	Crosstrack Error. Shortest distance to active leg of a Route.*
Dist to WP	Distance to selected Waypoint *
Dist t. Goal	Counted up sectors in front of the pilot up to the last WP of a Route*
Dist. t Takeoff	Distance from take-off position
L/D r. goal	Glide ratio over Ground needed to reach goal over several Waypoints in a Competition Route*
Dist to ^	Distance to last Climb*
Dist to CTR	Distance to next CTR

L/D gnd	actual glide ratio over ground ( = Groundspeed/Sink)*
L/D air	actual glide ratio ( = TAS/Sink)
L/D req	required glide ratio over ground to reach WP *
L/D req goal	required glide ratio over ground to reach Goal
Alt a. BG	Safety altitude above the best glide path*
Alt a. Wp	Arrival altitude above waypoint * (acc. to McCready)
Alt a. Goal	Precalculated arrival altitude over the last waypoint of a Route *
Temp	Temperature of circuit board
p/t	SMS pending/transmitted

SMS

\* Display only active when GPS Receiver is energised.

If nothing is changed after having selected a field, the instrument returns to normal function after 10 sec. and the previous display is shown again.  
 By pressing briefly the ► key, a **2nd and 3rd page with each time 7 displays** is accessible. Choose Basic Settings / Userfields for selection of these displays with each time 4 large fields, or 6 small fields.  
 In this case the compass rose is hidden, but the big arrow pointing to the WP remains visible.



We would like to assist the user by providing some approved recommendations for preset of 3 selectable field pages. Some of the displays are so interesting that we recommend to present these on each of the 3 possible field pages always at the same places. This would be for instance „Groundspeed“ or the wind component „Speed-Diff“.

**Page 1** is called up, if the pilot flies without predetermined goal (thus without the “GoTo” function) In addition to the displays mentioned before, also the fields for: Dist to ^; L/Dgnd; Flight Time; Alt2 or Temp could be displayed.

**Page 2** is used, if a waypoint (WP) to go for has been selected. Instead of the fields suggested above, values for Dist to WP; Alt a. BG; Alt a. WP should also be displayed here.

**Page 3** could be called up for the final glide to the landing area. Even if the pilot selects the large data representation here, the most important functions should be displayed here, such as the big arrow pointing to goal, and also Dist to WP; Spd-Diff; Gnd-Speed; Alt a BG; and Alt a. WP.

## Menu Sequences

Main Menu

Flight memory

Waypoints

Routes

Airspace

User Settings

Variometer

Basic filter

Digital Vario Integrator

Threshold last Climb

Specific Day Climb

Variometer Acoustics

Acoustic settings

Threshold ascent acoustic

Threshold Sinktones

Speed

Speed mode

Sensor setting Pitot

Sensor setting wind vane

Stall Speed

TEC Total Energy Compens.

Flight Memory

Recording Auto/Man

Recording interval

McCready

Polar Curves

Pilot's name

Type of aircraft

Aircraft ID

Manage Memory

Delete all flights

Delete all WP&Routes

Delete all Airspace data

Formatting the Memory

Simulation

Instrument Settings

Display contrast

Language

Battery type

Time zone

Units

Coordinate format

Bluetooth

SMS

Additional Software package

Package 00

Airspace (max 20) 01

Airspace (max 300) 02

Bluetooth SMS 03

Package 04

Package 05

Package 06

Package 07 - Factory settings

## Data exchange via PC

The basic equipment of IQ-COMPEO+ includes a data cable for a USB PC interface USB Mini B. Due to this feature data transfer can be carried out on both directions. The data transmission is effected via serial interface with: 57.600 baud; 1 startbit; 8 databit; 1 stopbit; no parity, Xon/Xoff

**Only readout** of flights saved in the flight memory is possible.

By use of the USB interface the IQ-COMPEO+ can also be operated for **data readout and entry:**

entire instrument configuration (Basic Settings, user defined displays)  
list of waypoints  
list of Routes

**Important remark:** the IQ-COMPEO+ must first be switched-on with visible Main Set-up Menu before the connection cable to the PC is plugged to the instrument for subsequent transfer of above mentioned data.

To perform data transfer the instrument needs to be switched to the **Main Set-up Menu** (prolonged pressing on the Menu key). Please observe the instructions of the software being used for transfer of stored flight data.

Data transfer for the **OLC** (On-Line-Contest Server) or to the XC-DHV Server is possible by use of the Flychart-Version or with the other programs listed hereunder. There are various software programs available for creation of IGC-files, partly even for OLC-files. For more detailed information please check homepage <http://www.onlinecontest.de/holc/> or contact BRÄUNIGER GmbH or the manufacturers listed below.

**Trackview (Freeware)** Daniel Zuppinger (for OLC and CCC) [www.softtoys.com/](http://www.softtoys.com/)

**Maxpunkte (Freeware)** Program from D.Münchmeyer for the Online-Contest of DHV  
<http://www.flugplatz-beilrode.de/maxpunkte/download.html>

**Compe-GPS** Ivan Twose (for Competition and private pilots, 3-D illustration)  
[www.compegps.com](http://www.compegps.com)

**Seeyou** (Flight schedule and Analysis software) [www.seeyou.ws/](http://www.seeyou.ws/)

**GPSDump** Stein Sorensen . Simple program for IGC-files  
<http://www.multinett.no/~stein.sorensen/>

In very rare cases it may happen that the instrument shows no reaction at all. **In this case the batteries or accumulators need to be taken out for minimum one minute.** As a result the instrument will perform a reset and should be switched-on again with the *ESC* key.

## Technical Data

Dimensions:	170 x 95 x 40 mm
Weight:	350 grams (without harness)
Power supply:	2 x 2 NiMh Accu AA with 2 LED's for charge monitoring
Battery operation time:	> 20 hrs. per Bank, in total approx. 40 hrs.
Altimeter:	max. 8000 m Scale 1m
Variometer:	analogue $\pm 8$ m/s Scale 0,2 m/s
digital	$\pm 100$ m/s
Scale 0,1 m/s	
Speed pitot pressure:	analogue 20 up to 60 km/h Scale 1 km/h
	or 30 up to 90 km/h
digital	20 up to 300 km/h "
Speed wind wheel:	analogue as for pitot pressure "
digital	0 up to 120 km/h "
Waypoints:	200 WP's
Routes:	20 Routes with max. 30 WP's each
Max. storage time:	48 hrs. flying time at 10 sec. recording interval Max. 290 Std. at 60 sec.
Number of tracklog points:	21 000
Number of recorded flights:	100
Number of CTRs (restricted Areas)	20 or 300 CTRs as polygons, circles or mixed

Data memory and transfer according to the IGC format

Screen Resolution	76'800 Pixel / 320 x 240 Pixel ( = ¼ VGA )
Operating temperature	-15 ... + 45 °C

**Important Comments!** In case standard 1,5 V Alkaline batteries are used it is prohibited to connect a battery charger! After having been switched-off, the instrument may only be switched-on again after 15 sec. waiting time.

Harness items for hang gliders and paragliders are available.

The Technical data may be altered without prior notification at anytime. Software upgrades can be made via Internet by downloading the latest firmware version from our homepage on the user PC.