# **BHC** Navigation Co., Ltd.

Best Handheld Creator in Navigation

BHC Navigation Co., Ltd. (BHCnav: Best Handheld Creator in Navigation) was legally registered in Beijing in 2004 and headquartered at Zhongguancun, which is considered as the Chinese Silicon Valley. With the purpose to promote the development of China satellite positioning and navigation industry, BHCnav keeps focusing on the field of GNSS development and modernization.

Between 2004 and 2009, the company inducted international GNSS brands and products into China and allocate products to sub-distributors, successfully built a big distributing network all over China. With 5 years of marketing, BHCnav has set up 14 representative offices all over China. As continues accumulation of marketing experience, BHCnav clearly realized what kind of product market really needs and what benefit will brought to sub-distributors and end-users if we sell exactly what the market needs.

- In June, 2009, BHCnav made the decision to develop its own brand and products.
- In October, 2010, BHCnav launched NAVA handheld GPS on the market
- The next year (in July, 2011) the second product, the GISA GIS data controller was released to the market
- One year later, 2012, Land Measurement GPS was released
- In 2013, SPORCA bicycle GPS
- In 2013, BHCnav industrial tablet PC

As quick and success grew, BHCnav build up International Marketing Team in December, 2011, and starting distributing products to local distributors in different countries.



National Navigation Device Quality Test Center certificates Provide OEM/ODM solutions Contact BHCnav team to know more

### <u>Today</u>

- The NAVA holds more than 40% share of the handheld GPS market in China.
- So far, BHCnav is the only company that has succeeded on every test of the National Navigation Device Quality Test Center, and owns all the certificates.
- BHCnav remains at the cutting edge of innovation with outdoor entertainment GPS and upcoming products, as Bicycle GPS and wrist GPS
- Develop special products to meet different usage and requirement.
- The company's products have sold to more than 55 countries all around the world and BHCnav is expanding its market year after year.
- BHCnav is proud of its strongly experienced R&D team in the field of GNSS, which allows us to offer reliable solutions to our customers. Thanks to its excellent service, high-quality products and win-win cooper ation business philosophy, BHCnav has become a leader in this field.

### **Our Mission**

 To become the Best Handheld Creator in Navigation, being a leading provider of GPS receivers/GIS handheld based solutions for business and personal use.

### **Our Spirit**

- Act in accordance with the laws and regulations in any circumstance.
- The staff observes the international, federal, state and local regulations and respects the rules and good practices relating to their activity.
- Establish a culture of integrity to avoid conflict between personal interests and company interests.
- We are deeply convinced that it's a duty to respect certain moral values.

### **Business Philosophy**

We feel that a strong cooperation will establish a faithful and mutually beneficial relationship. We apply this philosophy both external, with our suppliers and distributors, and internal, between our employees. Certificates.

#### **NAVA Land Measurement GPS**

NAVA Land Measurement is a new high-tech product independently researched and developed by BHCnav, which is functioned with Area & Length & Circumference & Price setting & Total Fare Calculation. It measures the length, width and area of the farm through satellites, and also has the function of unit price set and fare calculating. The product has been widely used in many agricultural activities for its creative handheld design and high performance and price ratio. NAVA Area Calculator is a very helpful tool for users' outdoor land measurement. It enjoys high reputation from users especially from forestry and agriculture.

- Automatic farmland area & length measurement
- Able to set the unit-price, having unit-price memory facility
- Farmland area date showing in terms of square meter or acres
- Total working price displaying after area measurement (Total price = area× unit-price)
- Current satellite signal intensity & measurement accuracy showing
- Current satellite signal positioning precision showing
- Current battery electric quantity showing, Built-in Battery Electronic Quality Indicator
- Schematic Diagram showing
- Press to measure farmland of any shape





### **NAVA Handheld GPS**

The NAVA handheld GPS offers functionalities for both professional and outdoor applications.



#### • Excellent GPS performance:

With its high-sensitivity, SBAS-enabled GPS receiver, NAVA locates your position quickly and precisely and maintains its GPS location even in heavy cover and deep canyons.

#### • Long battery life:

Powered by two AA batteries, NAVA can work for up to 15 hours. Powered by special Li-ion battery, NAVA can work for up to 25 hours.

#### • Built-in Sensor:

The built-in 3-axis E-compass provides you the bearing even when you stand still, and its barometer pinpoints air pressure. Also, you can use the thermometer to know temperature conditions.

#### • Multi-power source:

NAVA GPS can be powered by 2xAA, Li-ion, USB, vehicle power adapter, AC adapter.

#### • Micro SD expandable:

Use a Micro SD card to enlarge the storage memory up to 4G. The card slot is located inside the waterproof battery compartment.

• Lightweight and compact:

NAVA is lightweight and compact • the perfect size for all your travels.

• Waterproof:

IPX7

• Readable under sunlight:

65k colors Transflective TFT LCD

• Fast data transfer:

USB 2.0

• Drop resistance:

1.5m drop from all 6 edges

• User data compatibility:

Export and import user data from gpx, shp, kml, dxf, csv to NAVA proprietary format.

#### • Worldwide Basemap, city detail map, topo map support:

NAVA600 supports built-in worldwide basemap with countries boundaries and main city details. Other maps are optional and the complete list of available countries and related pricing is available upon request.

• Shortcut key:

Mark your current location as a waypoint directly by the MARK key.

• User POI icons:

You can design your own POI icons and load it to NAVA unit.

## **GISA GIS Data Controller**



#### Industry-Standard Manufacture

- Rugged shell cast with Industrial-grade GE fire-retardant Material
- Outdoor color display.
- Anywhere and any environment

Operating temperature -20 °C to +60 °C (-22 °F to +140 °F) Storage temperature -40 °C to +70 °C (-40 °F to +158 °F) High resistance: survives a 1.5 m (4.9 ft) drop onto plywood over concrete.

Test passed on IP67 (Dust and sand, waterproof).

- Professional Configuration
  - Features high-profiles hardware

Max to 624Mhz Marvell PXA310 Processor, Large RAM, Memory expansion, HD camera with High-bright LED.

- Excellent GPS Performance
  - Hi-sensitivity antenna, SiRF IV solution.
  - More (48) receive channels, integrated Real-Time SBAS.
  - NMEA0183 and SiRF Binary Protocols.
- More Solutions to Adapt Different Task2
  - Windows mobile 6.1 is recommended/Windows CE 6.0 is available.
  - Most GIS field software applications are available for both OS.
- Wider Range of Application
  - > Act as a GIS or GPS collector, working in a single unit.
  - Ideal for use with most RTK solutions and GNSS sensor3.
- Flexible communication Mode.
  - Integrate Bluetooth<sup>®</sup> technology for connectivity to supported devices.
  - Mobile peripherals, including Bluetooth earphones, printer, laser
  - rangefinder.
  - Mainstream GPS receivers, as a controller to RTK or GPS system solution.
- Integrates 802.11b/g wireless LAN for local network connectivity.
- **GPRS/WCDMA connector module**, alternative CDMA/EVDO More Optional Features and Interfaces can be configured.
- Selectable sensors listed below :
  - Thermometer and Barometer \ E-compass \ Gyroscope
  - RFID and RS232
  - > VGA resolution display, Camera can be upgraded to 5 Megapixels
  - > A Secondary MicroSD card slot for additional and backup storage
  - Micro SD card encoding

## **SPORCA Bicycle GPS Computer**



- 2.2 inches colored screen, readable in strong sunlight.
- Sports flexible style, streamline design, low wind.
- Resistance, easy to mount, fits any bicycle design well.
- Waterproof IPx7 (30 minutes under water at 1.0 meter).
- High sensitive GPS antenna and Barometric Altimeter.
- Show calories, rides, track, speed, miles and slope.
- Information.

- Make different ride plans according to your personal status.
- You can also create a virtual training partner to set objectives.
- Support wireless transmission, can work together with step.
- Frequency and other devices using the same protocol.
- Use with SPORCA PC software, analyze and manage your physical status. You can upload and share your riding data on professional bicycle riding websites or on Google Earth.



### **GISA Tablet PC**

#### *Fully-rugged Android tablet designed for professionals*

BHCnav tablet PC is engineered with enterprise-grade security, seamless connectivity and a long legacy of rugged, reliable computing to create the best built tablets ever for mobile workers in any industry.



• Android Full Functionning tablet PC

Fully-rugged BHCnav Tablet PC resistant to dust, water and up to 5ft. drop. Mobile users can work without restrictions even in extreme temperature. It's Not Just a tablet; it's a fully functioning PC. The BHCnav Tablet PCruns the programs you need on an Android operating system. Featuring a docking keyboard, 7 inch touch screen; it provides you a perfect working environment anytime anywhere. • Safe Industry Tablet PC

BHCnav Tablet PC contains software security to keep you data safe, as well as individual security features. It keeps secured information separate from the main processors for ultimate device protection.

Are compatible with devices controls for Mobile Device Management software, which allows the tablets to be managed and highly secured by a network administrator.

• Fast Data Transmitting Tablet PC

Availed 4G LTE broadband delivers faster, more reliable speeds for better information delivery.



### **Thanks you for reading!**

### **OEM & ODM service**

## Feel free to contact us for more details and specifications

Design the product that fits your activity!

With our experienced R&D team, we are able to offer customized solutions to satisfy our customer's needs.

#### • External aspect

We can craft your device with your own design and colors. We can also add your own brand and product's name on our device (instead of BHCnav).

#### • Hardware

Want another sensor? Wants to get rid of all the parts you don't need? You can choose to add or remove any sensor or peripheral from any of our devices... Or even ask for a fully new device!

• Software

The software can be adapted\* to your needs: Adding new language, new functionalities ... BHC Navigation Co., Ltd.

39°59'12.68" N 116°19'3 9.16" E GMT+08:00

Tel: +86-10-51266697 ext. 1020/1022/1026/1027/1029 (English language) Fax: +86-10-82600298

Address: 7 Floor, Tower C, Intelli-Center, No.18 Zhongguancun East Road, Haidian District, Beijing, 100083, China

www.BHCnav.com



## NAVA Land Measurement GPS

Physical & Performance /Model	NAVA 110	
Dimensions	120x57x30	
Display	2.2" mono color display	
Weight	105g (without battery)	
Battery	2xAA	
Work time	30 hours	
Standby time	12 days	
GPS receiver	48 Channel: Stand alone 2.5m, SBAS 1-3m	
Water Proof	IPX-7	
Drop Resistance	1.5m	
Operation Temperature	-20℃+60℃	
Storage Temperature	-40℃+85℃	
Specifications	NAVA 110	
Area Measurement	Yes	
Line Length Measurement	Yes	
Unit-price Setting	Yes	
Record	Yes	
Regular Field Measurement	Yes	
Slop Area Measurement	Yes	
Satellite display	Yes	
	Package Contents	
	NAVA GPS	
	User manual	
	Reference guide	
	Neck lanyard	
	USB cable	

# NAVA Handheld GPS

Physical & Performance	NAVA200	NAVA300	NAVA400	NAVA600
Unit Dimension, WxHxD		56x119	0x32mm	
, Display	2.2" QVGA, 240x320 pixels, Transflective TFT, 65536 colors			
Weight			out battery)	
Battery (not included)	2xAA		A or Special Li-ion Bat	tterv
Battery life	15 hours		rs), Special Li-ion Batt	· ·
GPS Receiver	20 Ch	•	High Sensitive GPS M	
Acquisition Time		Cold Start: < 35	s, Hot Start: <1s	
GPS Accuracy		3-7m (GPS onl	y), 1-3m (SBAS)	
SBAS	WASS, EGNOS, MSAS			
Update Rate	1/second, continuous			
Interface		USB 2.0 and NME	A 0183 compatible	
Waterproof		IP	X-7	
Features	NAVA200	NAVA300	NAVA400	NAVA600
Basemap	No	Yes	Yes	Yes
Built-in memory		12	8M	
Micro SD card slot	No	No	Yes	Yes
Waypoints		30	000	
Routes		6	50	
Tracks		50 tracks,	5000 points	1
Electronic Compass	No	No	No	Yes
Barometric Altimeter	No	No	No	Yes
Temperature	No	No	No	Yes
Hunt/Fish		Y	es	
Sun/Moon		Y	es	
Calculator		Y	es	
Area Calculation		Y	es	
Coordinate System		WGS84, UTM	, User Grid…	
		Standard Pa	cking List	
In the Box	NAVA200	NAVA300	NAVA400	NAVA600
NAVA GPS Device		Y	es	
Owner's Manual		Y	es	
Quick Reference Guide		Y	es	
Neck Lanyard		Y	es	1
USB Cable	No	Yes	Yes	Yes
		Optional Acc		
Accessories (Optional)	NAVA200	NAVA300	NAVA400	NAVA600
Dashboard Mount	Yes	Yes	Yes	Yes
Bike Mount	Yes	Yes	Yes	Yes
Carrying Case	Yes	Yes	Yes	Yes
Vehicle Power Adapter	Yes	Yes	Yes	Yes
USB Cable	Yes	Yes	Yes	Yes
Lithium Battery	No	Yes	Yes	Yes
AC Power Adapter	No	Yes	Yes	Yes
Neck Lanyard	Yes	Yes	Yes	Yes

# **GISA GIS Data Controller**

Physical & Performance /Model	M10	M20	M50	M60
CPU	PXA310(624MHz)	PXA310(624MHz)	PXA310(624MHz)	PXA310(624MHz)
Memory	256M DDR	256M DDR	256M DDR	256M DDR
NandFlash	256M	256M	512M	512M
Screen	QVGA	QVGA	QVGA	VGA
Bluetooth	V	V	v	V
Wi-Fi	V	V	v	V
GPRS	×	V	×	×
3G	×	×	v	V
Camera	300 Mpixel	300 Mpixel	300 Mpixel	300 Mpixel
Micro SD card	V	V	٧	V
USB HOST	×	V	v	V
RS232	×	×	V	V
Barometer altimeter	×	×	٧	V
E-compass	×	×	V	V
External Antenna	V	V	v	V
Speaker	V	V	٧	V
Microphone	V	V	v	V
Earphone	×	V	v	V
Headphone	V	V	٧	V
Keyboard	V	V	V	V
Keyboard noctilucent function	×	V	v	v
Li battery	3000mAh	3000mAh	3000mAh	3000mAh
Flashlamp/Touchligh function	V	V	v	V

# GISA Tablet PC

Specification of 7" Rugged Tablet		
Physical	Dimensions	213*141*17.75mm
	Weight	2.1 lbs

	Hardw	are
CPU	Chipset	RK3066 Quad Mali 400 GPU
	Processor	ARM dual-core cortex-a9
	Fréquency	1.6GHz
Storage and Memory	RAM	1GB DDR3 SDRAM
	ROM	16GB Nand Flash
	Expansion Slot	Additional with Micro SD card
Display	LCD Display	7" TFT IPS
	Resolution	1280×800
	Backlight	LED
	Multi-touch capacitive screen	5 points
Capacitive Stylus		$\checkmark$
3G Module	WCDMA/EVDO	V
	Audio call	V
	Data Transmission	$\checkmark$
	SMS&MMS	V
Wireless	802.11 b/g/n	V
Bluetooth	Bluetooth 2.1+EDR	V
	Audio	√
GPS		V
USB	USB2.0	$\checkmark$
	OTG	<u>۷</u>
Front Camera	Résolution	2MP
	CMOS	V
Rear Camera	Resolution	5MP
	<u>CM05</u>	√
	CMOS	V ↓
	Auto Focus	
Compose	Flash	V
Sensor	E-compass	V
	2 Avis Gyroscopo	2/
Audio	3-Axis Gyroscope Microphone	√ √
Audio		<b>v</b>
	Speaker ( full waterproof)	2, 8Ω/0.5W
	Headphone(full waterproof)	V
Charging indicator	2 Double color led	Red=charging, green=full
		הכע-כוומו בוווב, בו כבוו-ועוו

Interface	SIM Card	<u>۷</u>
	Micro SD Card	√ 
	Micro USB	√ √
	30pin USB	
	Charging dock	
	Headphones/Speaker	,
Dock	Charging dock	4 pin
	External charging dock	4 pin
	DC IN	Priorité batterie externe
key	Engine inducing key	1 power key, 1 reset key, 2 audio volume up/down key 4 function key
Battery	Lithium, 5000mAh	n/3.7V, operation time≥5hrs
Accessories	AC adapter	5V/2A
	USB cable	√
	Microphone	<u>۷</u>
	Manual & Warranty card	√
		oftware
Operation system		ndroid 4.1
Media player	Adobe Flash	V11
Menu		
IVIEIIU	Language	Android OS supports Multi language and lacal
wenu	Language	Android OS supports Multi-language and local combinations
wenu	Language	
Audio		combinations
	UI	combinations TBD
	UI Codec	combinations   TBD   MPEG-1/2 Audio Layer 1/2/3
Audio	UI Codec Format	combinationsTBDMPEG-1/2 Audio Layer 1/2/3MP3, AAC, OGG, FLACH.264/H.263, MPEG-4/2/1,VP8,DiVX4/5/6, XVID,MKV, MPG, MP4, AVI, RMVB,
Audio	UI Codec Format Codec Format	combinationsTBDMPEG-1/2 Audio Layer 1/2/3MP3, AAC, OGG, FLACH.264/H.263, MPEG-4/2/1,VP8,DiVX4/5/6, XVID,MKV, MPG, MP4, AVI, RMVB,VOB, DAT
Audio Vidéo	UI Codec Format Codec	combinationsTBDMPEG-1/2 Audio Layer 1/2/3MP3, AAC, OGG, FLACH.264/H.263, MPEG-4/2/1, VP8,DiVX4/5/6, XVID,MKV, MPG, MP4, AVI, RMVB, VOB, DATUp to 1920×1080p
Audio	UI Codec Format Codec Format Resolution	combinationsTBDMPEG-1/2 Audio Layer 1/2/3MP3, AAC, OGG, FLACH.264/H.263, MPEG-4/2/1,VP8,DiVX4/5/6, XVID,MKV, MPG, MP4, AVI, RMVB,VOB, DAT