

GPS Receiver Kit for Uniden Scanners

BC-GPSK



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PACKAGE CONTENTS

- BC-GPSK Serial GPS Receiver
- RS232 Adapter Cable

INTRODUCTION

The BC-GPSK is a serial GPS receiver that provides NMEA 0183 standard output for your scanner, APRS, Marine Radio, or other application that calls for an industry standard GPS output.

The BC-GPSK is ideal for use with all of Uniden Bearcat scanners that include Location-Based Scanning, including:

- HomePatrol-1*
- BCD396XT*
- BC346XT*
- BCD996XT
- BCT15X

INSTALLATION

1. Place the receiver in a location that has an clear view of the sky, such as on any surface outside your vehicle, on the dashboard, or on the rear deck. The receiver sticks to any steel surface, so mounting hardware is not required.

WARNING: Place the receiver in a location that will not be a hazard to the driver or passengers in the event of a traffic accident or sudden stop. Be sure the receiver and its wires will not interfere with the deployment of air bags or other safety features on your vehicle.

2. The receiver cable has a 6-pin connector, making it easier to route the cable into your vehicle. Once you position the receiver, route the cable into the vehicle cabin. Then, plug the cable into the RS232 Adapter cable's plug.
3. Plug the RS232 Adapter cable's DB9 connector into your scanner or other device or, if necessary, plug the cable into any required adapter cable, then plug that cable into your device.
4. Plug the Accessory Power Plug into a power outlet in your vehicle.

USING THE GPS RECEIVER

When power is applied to the BC-GPSK, it turns on and searches for satellite signals. The table below shows the meaning of the LED status.

LED OFF: GPS receiver is off (no power).

LED ON (solid): No fix, searching for GPS signals.

LED FLASHING: Position fix established and GPS signals are being received.

IMPORTANT:

You must change the baud rate setting of your scanner's port to 4800 bps to receive GPS data.

FAQ's

Why does the GPS not work near buildings and other tall objects?

GPS uses satellites to determine location, so it needs a clear view of the sky. Tall buildings and other objects that block the receiver's view to the sky make it impossible to get your location. Sometimes the satellites are near the horizon. In these cases the GPS must have a clear view of the horizon.

How do I turn on Location Based Scanning in my scanner?

You typically only need to be sure the scanner's port speed is set to 4800 bps. The scanner automatically uses the GPS data as soon as satellite positioning information is available.

* Requires GPS Adapter Cable (Uniden Part Number BWZG1844001) – not included.

SAFETY AND LEGAL NOTICES**Read this section carefully before using the GPS receiver**

Uniden America Corporation does not accept responsibility for accidents resulting from failure to observe common sense precautions.

WARNING: Make sure that the GPS receiver is secure and does not interfere with driving visibility and safety.

Securely position the GPS and its cables so that they do not interfere with driving or prevent operation of any vehicle safety device (such as the air bag). Do not mount the GPS where the driver or passengers may be injured during vehicle operation or collision. Route all cables away from shifters, pedals, accessory controls, and mechanisms.

WARNING: Drive safely and use common sense.

Drive safely, observe all traffic rules, and above all use good judgment while driving. Do not let the operation of your scanner with or without the GPS connected interfere with your attention to driving.

WARNING: Keep your eyes on the road.

Keep your eyes on the road and be an alert driver at all times, especially when the vehicle is moving. The vehicle operator should not be distracted by the scanner or other equipment in the vehicle. Should a distraction interfere with your ability to drive responsibly, please turn off the device. Should you want to look at the display for a prolonged time, first safely park the car.

WARNING: Do not remove covers or open housings. No user serviceable parts inside. Refer servicing to qualified personnel.

SPECIFICATIONS

GPS Chipset	SiRF Star III e/LP
Horizontal Position Accuracy	5m 2D RMS WAAS received 10m 2D RMS WAAS not received
Velocity Accuracy	0.1m/sec 95% (SA off),
Time Accuracy	1 micro-second synchronized to GPS time
Datum	WGS-84
Hot start	1 sec., average (with ephemeris and almanac valid)
Warm start	38 sec., average (with almanac but not ephemeris)
Cold start	42 sec., average (neither almanac nor ephemeris)
Reacquisition	0.1 sec. average (interruption recovery time)
GPS Protocol	NMEA 0183
GPS Output Data	NMEA 0183 V2.2 protocol, and supports command: GGA, GSA, GSV, RMC
GPS transfer rate	Software command setting (Default : 4800,n,8,1 for NMEA)
Acceleration Limit	Less than 4g
Altitude Limit	18,000 meters (60,000 feet) max.
Velocity Limit	515 meters/sec. (1,000 knots) max.
Jerk Limit	20 m/sec**3
Operating Temperature	-40°~ 185°F (-40°~ 85°C)
Storage Temperature	-40°~ 185°F (-40°~ 85°C)
Humidity	Up to 95% non-condensing
Voltage	13.8V DC Input (nominal)
Current	42 mA typical

Due to continuous product improvements, all specifications are subject to change without notice.

LIMITED WARRANTY

WARRANTOR: UNIDEN AMERICA CORPORATION (Uniden)

ELEMENTS OF WARRANTY: Uniden warrants, for one year, to the original retail owner, this Uniden Product to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original user shall terminate and be of no further effect 12 months after the date of original retail sale. The warranty is invalid if the Product is:

- (A) damaged or not maintained as reasonable or necessary,
- (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by Uniden,
- (C) improperly installed,
- (D) serviced or repaired by someone other than an authorized Uniden service center for a defect or malfunction covered by this warranty,
- (E) used in any conjunction with equipment or parts or as part of any system not manufactured by Uniden, or
- (F) installed or programmed by anyone other than as detailed by the Operating Guide for this product.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will repair the defect and return it to you without charge for parts, service, or any other cost (except shipping and handling) incurred by warrantor or its representatives in connection with the performance of this warranty. THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion might not apply to you.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you might also have other rights which vary from state to state. This warranty is void outside the United States of America.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: If, after following the instructions in this Operating Guide you are certain that the Product is defective, pack the Product carefully (preferably in its original packaging). Include evidence of original purchase and a note describing the defect that has caused you to return it. The Product should be shipped freight prepaid, by traceable means, or delivered, to warrantor at:

Uniden America Corporation
Parts and Service Division
4700 Amon Carter Boulevard
Fort Worth, TX 76155

FCC NOTICE

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC RF Exposure requirements: This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.