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## BRPC Software Development Kit (SDK)

Thank you for choosing to use Navico BRPC Software Development Kit (SDK). This SDK incorporates software libraries for you to use within your development system to create application(s) that can interface BRPC supported Navico Radars. This document contains some important information about this SDK, where to get additional information and where to get help.

## BRPC SDK

This SDK has been provided to you because you have:

- Completed and returned a BRPC survey
- Signed and returned a Navico NDA non-disclosure agreement
- Signed and returned a Navico BRPC supply license agreement

Please note that this is your copy and must not be copied or forwarded to anyone outside of your organization (i.e. not covered by the above agreements); and must be used for the intended purpose.

## Getting Information (General BRPC enquiries)

For general enquiries about the BRPC Software Development Kit (SDK) please use the following email address: For general BRPC enquiries, email: [brpc\\_info@navico.com](mailto:brpc_info@navico.com)

## Getting Help (Technical Support)

Navico will provide Technical Support to your developers using the BRPC SDK. In order to get support, you must first purchase a BRPC Technical Support package. A BRPC Technical Support package provides for 5 hours of telephone or email support; each support call uses a minimum of 0.5 hour per call. In the case of email support, the Navico Support department will advise any time used, but again a minimum of 0.5 hour will be used. BRPC Technical Support packages can only be used for supporting the BRPC SDK directly. Please check the BRPC FAQ document first before requesting Technical Support.

You can request Technical Support by emailing: [brpc\\_help@navico.com](mailto:brpc_help@navico.com)

To purchase a BRPC Technical support package, please contact your **BRPC representative** as indicated above.

## Purchasing BRPC Un-Lock keys

Unlock Keys are required to be purchased in order to unlock a BRPC supported Navico radar. Each and every radar will require its own unique Unlock Key.

There are 2 Lock Levels: LL1 and LL2. Each level unlocks a certain amount of radar functionality – see the Controls.pdf document for information on the lock level functionality.

To purchase a BRPC Unlock Key, a Lock-ID must first be generated by the radar you want to unlock and use with the BRPC SDK.

Follow the 'How to get an Unlock Key' procedure outlined below and send the details to your **BRPC representative** as indicated above.

## How to get an Unlock Key:

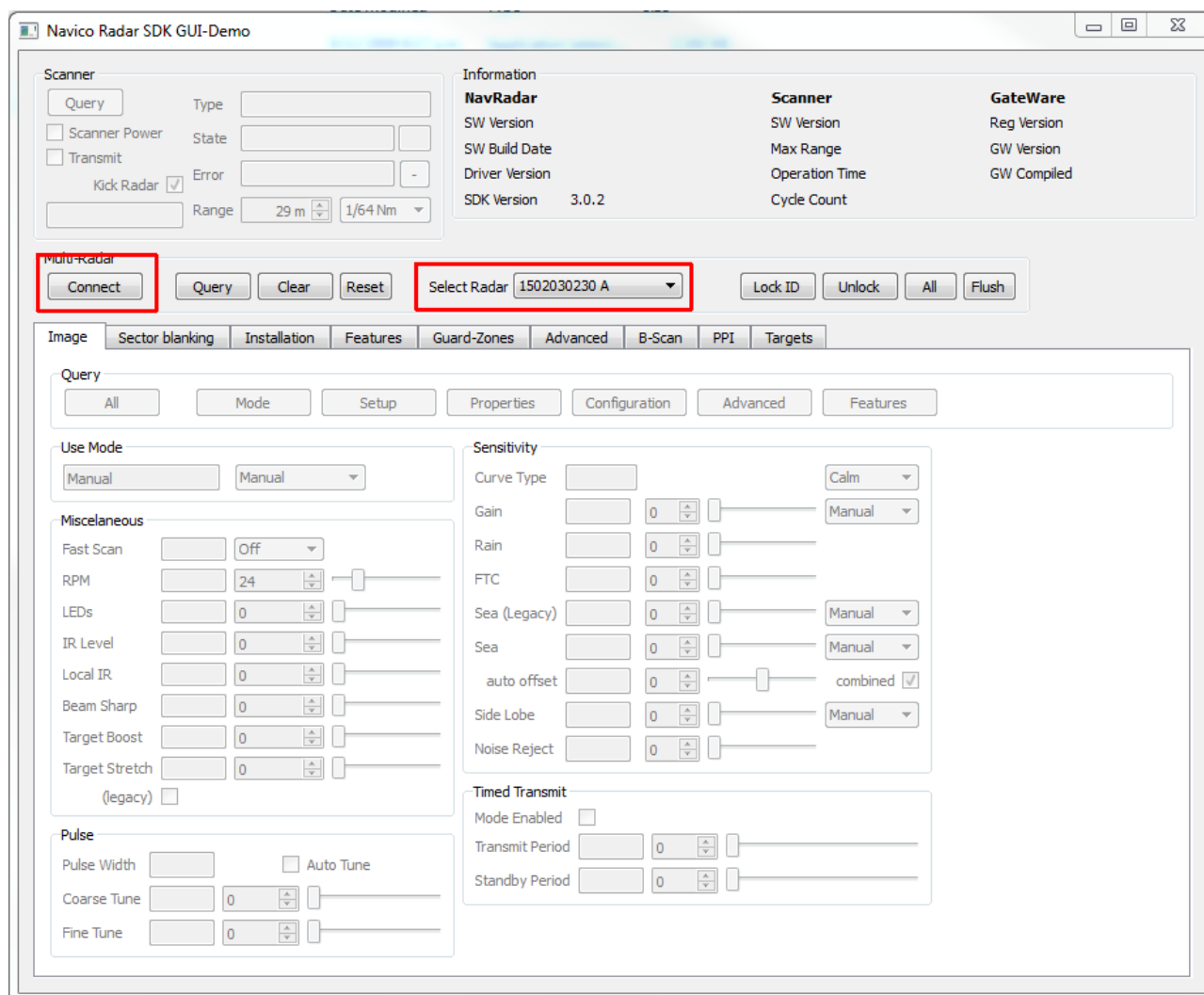
1. Generate the Lock-ID:
  - A unique **Lock-ID** must be gained from each Radar to be unlocked. The procedure below shows a simple method of generating the Lock-ID using the Demo application that is provided with the SDK library. Note: Each radar has its own unique Lock-ID; you must generate a Lock-ID for each radar that you wish to use the SDK with.
2. Send the Lock-ID to Navico:
  - Send the **Lock-ID** along with the **Radar Serial number** and your **Unique ID** number (BRPCxxx as indicated at the top of this letter) to Navico. All of these details are required for Navico to generate the **Unlock Key**. Complete the form later in this document and send to your **BRPC Representative**.
3. The Unlock Key will be emailed to you once proof of payment is confirmed.

## How to generate the Lock-ID:

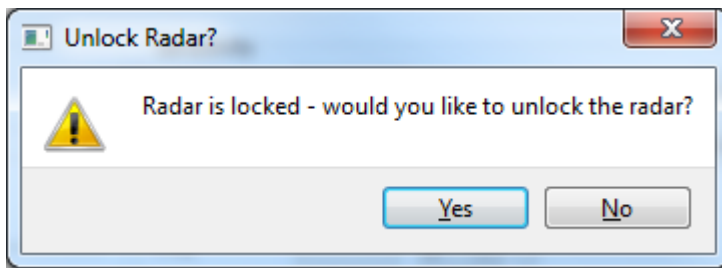
The Radar must be connected to the PC – run the demo application that was provided with the BRPC SDK libraries.

Note: if this is the first time running the demo application, you will need to allow access through your firewall. Ensure Private and Public network access is granted.

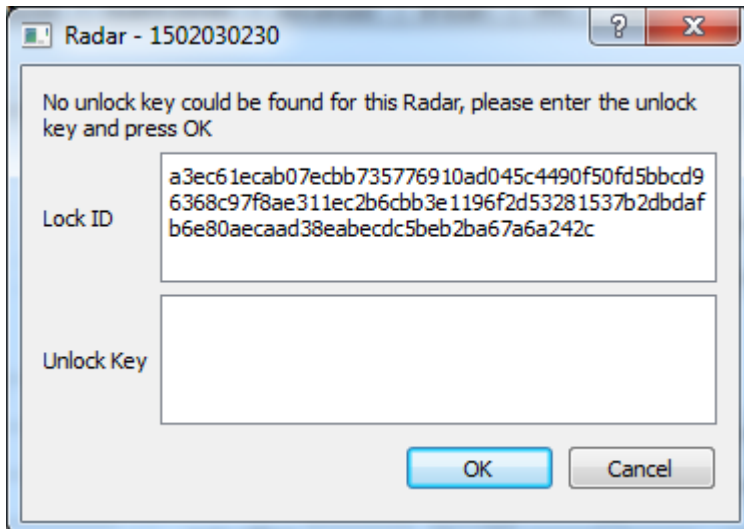
The radar serial number should be displayed in the 'Select Radar' box. Press 'Connect':



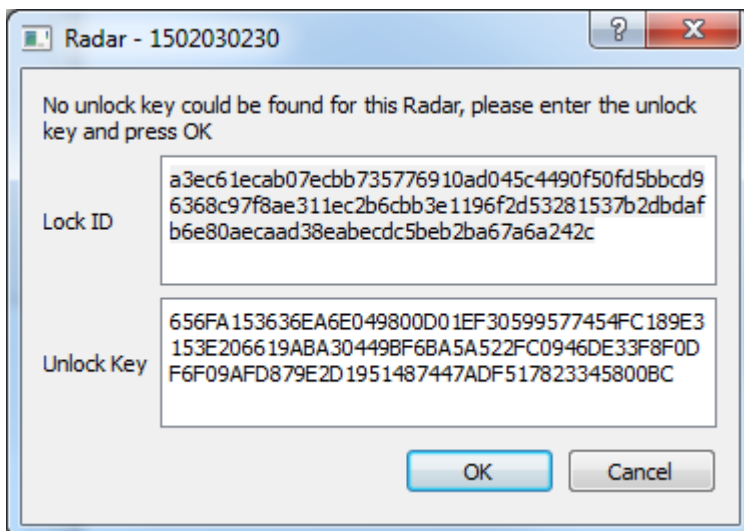
At this stage, you will not be able to **Connect** to the Radar as it is not yet unlocked - an error message will result:



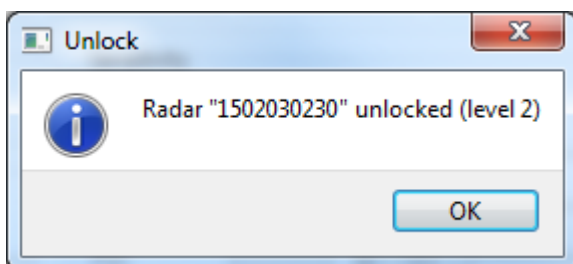
Click Yes to show the Lock-ID screen.



Send the full text shown in the **Lock ID** field along with the serial number of the Broadband Radar to Navico. Lock ID must be sent in editable text format.



Navico will send you the **Unlock Key** for this radar. Cut & Paste into the **Unlock Key** field and click OK.



The radar is now unlocked and ready for use with the SDK Library.

Before operating the radar, please ensure it is safe to do so:

## BEFORE POWERING THE DEVICE

### ENSURE A SAFETY PERSON HAS CONFIRMED WAVEGUIDE IS NOT OPEN/EXPOSED

- Observe safety precautions especially for open-array PULSE and PULSE COMPRESSION radars.
- DO NOT OPERATE without the Antenna/Array installed, or a suitable dummy load is installed.
- Observe minimum safety distances.

Navico Radar SDK GUI-Demo

Scanner

Query

Type: Navico BRHALO

State: Standby

Range: 29 m

1852.0 m

1/64 Nm

Information

NavRadar

SW Version: 5.2.18

SW Build Date: Dec 2 2015 21:28:39

Driver Version: 0.0

SDK Version: 3.0.2

Scanner

SW Version: 0.34-1

Max Range: 64 Nm

Operation Time: 872 h

Cycle Count: 40

GateWare

Reg Version: 7.0

GW Version: 9.22

GW Compiled: 0xE

Multi-Radar

Connect

Query

Clear

Reset

Select Radar: 1502030230 A

Lock ID

Unlock

All

Flush

Image

Sector blanking

Installation

Features

Guard-Zones

Advanced

B-Scan

PPI

Targets

Query

All

Mode

Setup

Properties

Configuration

Advanced

Features

Use Mode

Harbour

Harbour

Miscellaneous

Fast Scan: 48 rpm

RPM: 0

LEDs: 0

IR Level: 2

Local IR: 0

Beam Sharp: 2

Target Boost: 1

Target Stretch: 1

(legacy) ☒

Pulse

Pulse Width: 0

Coarse Tune: 0

Fine Tune: 0

Auto Tune ☐

Sensitivity

Curve Type: Moderate

Gain: 130

Rain: 75

FTC: 0

Sea (Legacy): 97

Sea: 38

auto offset: 0

Side Lobe: 0

Noise Reject: 2

Timed Transmit

Mode Enabled ☐

Transmit Period: 10

Standby Period: 10

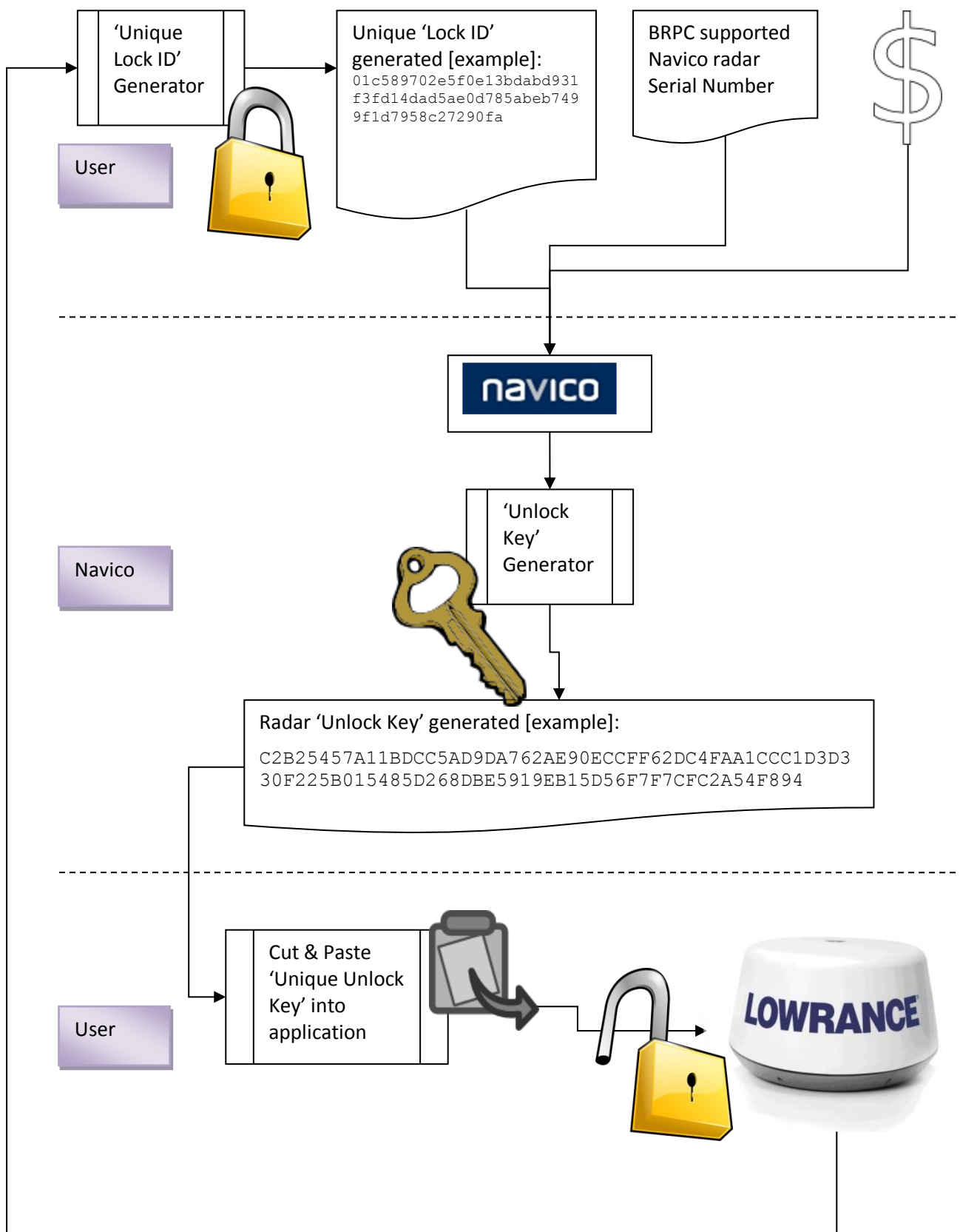


## RF POWER AMPLIFIER SAFETY



## DO NOT OPERATE

unless covered and terminated correctly



Use this form when requesting an **Unlock Key** from Navico:

Company Name:			
Unique ID:			
PO or reference:		Radar model: (BR24, 3G, 4G)	
Radar Serial number:		Unlock Level: (LL1 or LL2)	
Lock-ID:			
Unlock Key: (NAVICO to complete)			

Company Name:			
Unique ID:			
PO or reference:		Radar model: (BR24, 3G, 4G)	
Radar Serial number:		Unlock Level: (LL1 or LL2)	
Lock-ID:			
Unlock Key: (NAVICO to complete)			

Company Name:			
Unique ID:			
PO or reference:		Radar model: (BR24, 3G, 4G)	
Radar Serial number:		Unlock Level: (LL1 or LL2)	
Lock-ID:			
Unlock Key: (NAVICO to complete)			