

# Breakout box for Kenwood AutoTune Audio 7801



preliminary

## modern engineering & design

Edition 06/2020

rfe-global GmbH

Marie-Curie-Str. 1

26129 Oldenburg (Oldb)

Tel: +49 441 94911 655

Fax: +49 441 94911 659

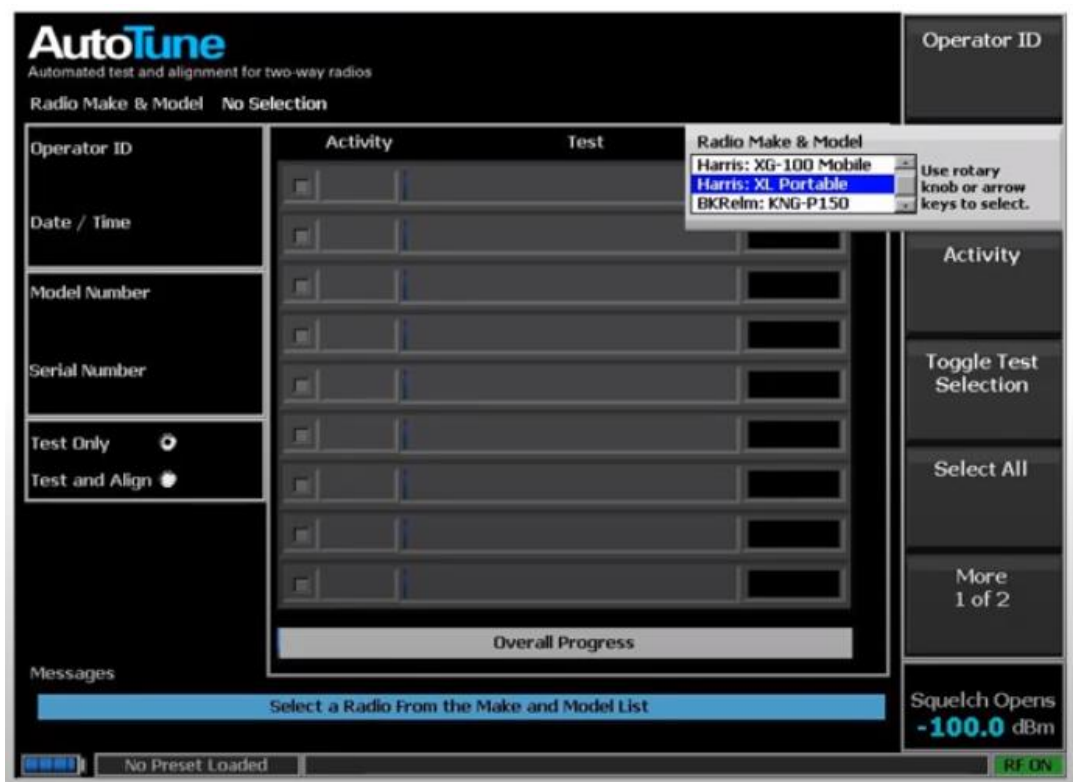
E-Mail: [info@rfe-global.com](mailto:info@rfe-global.com)

**rfe-global**  
radio frequency equipment

## Breakout box for Kenwood AutoTune Audio

A Breakout box is a device that splits an electric multicable line into several compound connectors. It allows remote switching and signal injection/outputs for radio performance checks.

The Breakout box for Kenwood is a product designed for all Kenwood two-way portable radios as well as mobile radios currently serviced by the FREEDOM R8000 Series Communication System Analyzer using the R8-AT-KWNX option (AutoTune for Kenwood NX and NX-3000/5000 Series).



- On the front, it includes a Test/Tuning option, Mic/Speaker option, Radio connector and a KPG-46 Mic connector.



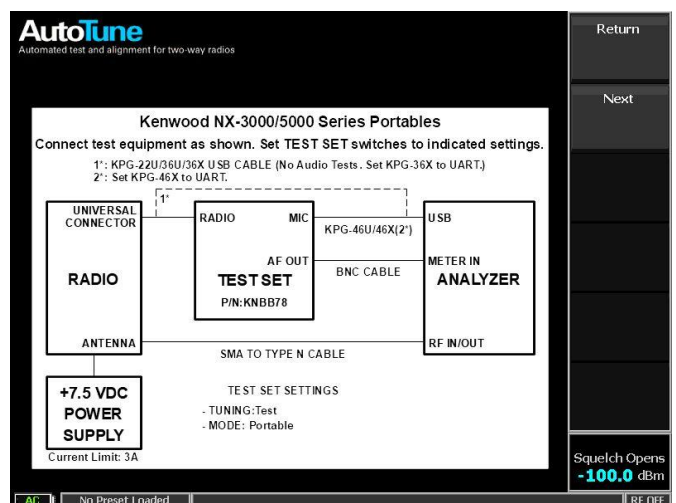
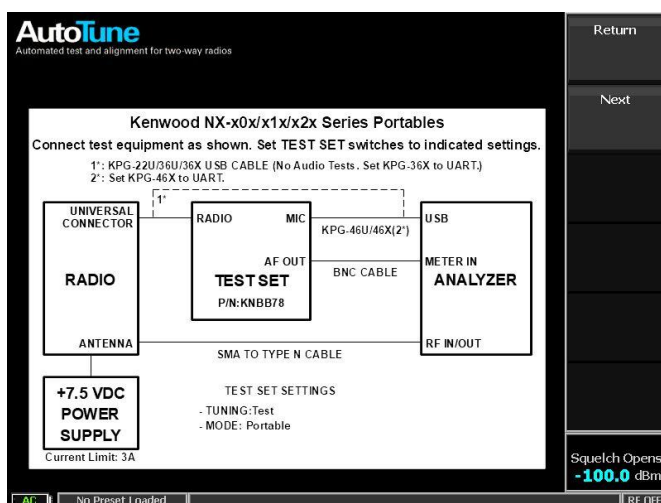
- On the back, it includes the ports: BER Data / SMIC, BER CLK/ OPT, AF Out, AG In and PPT/TXD.



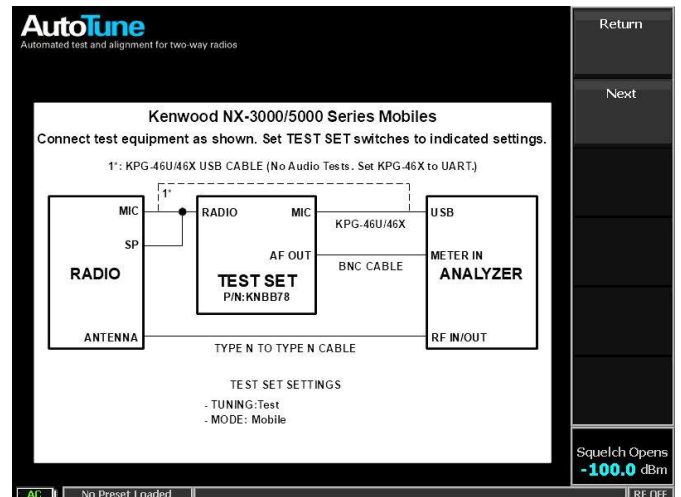
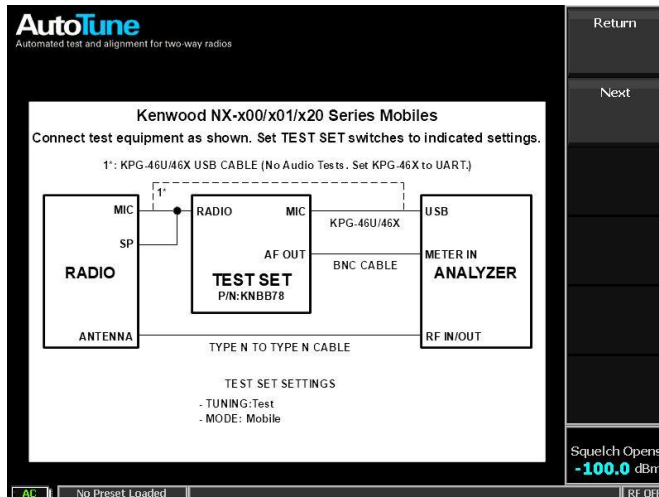
## NX Portable Setup

- The Breakout box for Kenwood is connected to the radio under test with a specific USB programming cable. This cable connects the signals present at the radio's universal connector, such as the external speaker and external Push-To-Talk (PTT) input, to the Breakout box for Kenwood (Test Set).
- The FREEDOM R8000 Series Communication System Analyzer setup consists of two BNC cables that connects the AF Out from the Test Set to the Meter In port on the Analyzer and the AG In from the Test Set to the Mod In/ Out port from the Analyzer. A USB programming cable or interface cable connects the USB port of the R8000 Analyzer to the Mic port of the Test Set. Additionally, a SMA to type N cable is used to connect the Antenna of the radio under test with the RF In/Out port of the Analyzer. The radio's universal connector is connected to the Radio connector on the Test Set.

### NX Portable Test Setup Diagram



## NX Mobile Test Setup Diagram



# Breakout box for Kenwood Specifications

Name	Description
<b>Order Number</b>	
7801	Breakout box for Kenwood AutoTune Audio Tests
Dimensions 7801	200mm x 170mm x 36mm
7802	Cable Set for 7801
<b>Compatible cables and connectors</b>	
KPG-46U / KPG-46X	USB Programming Cable - 8 Pin Modular
<b>Compatible portable and mobile devices</b>	
Kenwood NX series models	NX-200[G S], NX-210[G], NX-300[G S], NX-320, NX-410, NX-411, NX-700[H], NX-706, NX-800[H], NX-806, NX-820[H HG], NX-900, NX-901, NX-3000, NX 5000



7801 Breakout box



7802 Cable Set for 7801

- No Radio Test Cables are included with the Breakout Box for Kenwood.

The manufacturer reserves the right to implement technical changes.