

MODIFICATION RECOMMENDED

E6621A-01

S E R V I C E N O T E

Supersedes:
NONE

E6621A - PXT Wireless Communications Test Set

Serial Numbers: ALL

Downgrading E6621A Software (Firmware) May Affect Instrument Accuracy

Parts Required:

| P/N | Description | Qty. |
|------|-------------|------|
| NONE | | |

ADMINISTRATIVE INFORMATION

| | | | |
|---|---|--|---|
| SERVICE NOTE CLASSIFICATION: | | | |
| MODIFICATION RECOMMENDED | | | |
| ACTION CATEGORY: | X ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME | STANDARDS | LABOR: 0.5 Hours |
| LOCATION CATEGORY: | X CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNER | SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP X SEE TEXT | USED PARTS: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP X SEE TEXT |
| AVAILABILITY: | PRODUCT'S SUPPORT LIFE | NO CHARGE AVAILABLE UNTIL: 31-December-2013 | |
| <input type="checkbox"/> Calibration Required X Calibration NOT Required | PRODUCT LINE: 13 AUTHOR: FC | | |
| ADDITIONAL INFORMATION: Service Inventory and Used Parts are unaffected as this is a software update. | | | |

© AGILENT TECHNOLOGIES, INC. 2013
PRINTED IN U.S.A.

January 2, 2013
Rev. 20



Situation:

The I/Q calibration process for E6621A was modified during December 2012 to support new features being introduced at software (firmware) release 6.4.2.0.

During the software qualification process, it was noted that the calibration data files generated by the new process were not fully compatible with software versions older than 6.4.2.0.

If an instrument is calibrated using the new process, and is then downgraded to a version older than 6.4.2.0, performance may be affected as follows:

- Downlink (source) level accuracy may degrade by as much as 0.4 dB.
- Downlink EVM may degrade to the point where the instrument cannot connect to a device.

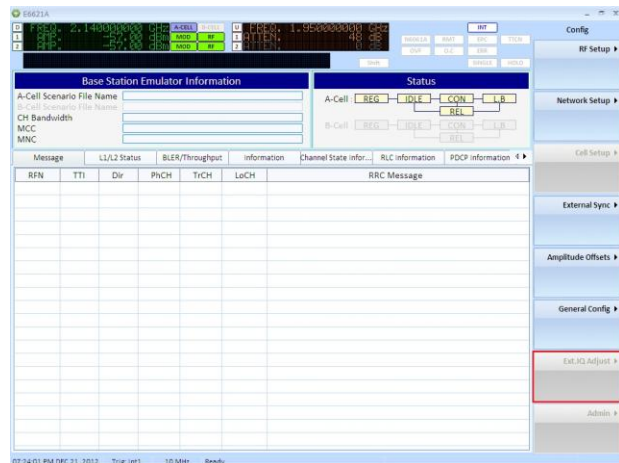
Solution/Action:

Software release 6.4.2.0 introduced a feature that allows the user to compensate for external I/Q timing skew when using the “out” and “return” BNC connectors. This feature is accessible via the following keypresses:

[Config], {Ext.IQ Adjust}

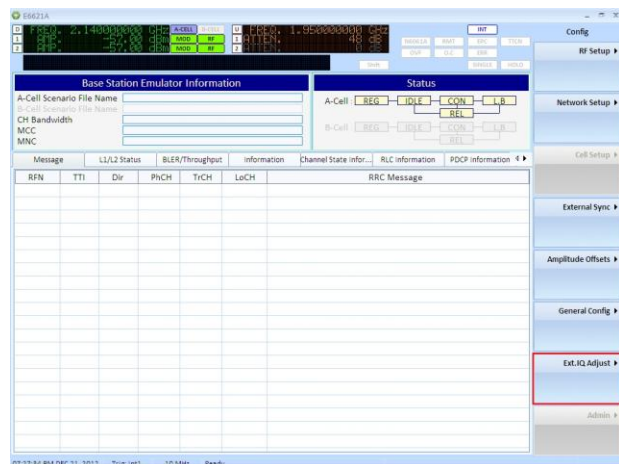
If the “Ext.IQ Adjust” softkey is greyed-out on the front panel display, this indicates that the E6621A calibration data files have been generated using the original method (i.e. pre-dating software release 6.4.2.0).

In this instance, the software can be downgraded without affecting downlink level accuracy or downlink EVM.



If the “Ext.IQ Adjust” softkey is accessible (i.e. **not** greyed-out on the front panel display), this indicates that the E6621A calibration data files have been generated using the new method.

In this instance, the software should not be downgraded – doing so may degrade downlink level accuracy and downlink EVM.

**NOTE:**

If performance has been degraded because of a software downgrade, then this is not permanent. Performance can be recovered by re-installing software version 6.4.2.0 (or newer).