



TB8100 base station

# Release Notes

Technical Note TN-1434-SR  
18 March 2009

This technical note contains late-breaking information to accompany the March 2009 release of the TB8100 base station. It also provides additional information about:

- Service Kit software version 03.07.
- Calibration Kit software version 03.08.
- Reciter firmware versions 03.21 and earlier.
- PA firmware versions 03.09 and earlier.
- PMU firmware versions 03.09 and earlier.

## 1 What's New in This Release

This release is a maintenance release that brings together a number of customer-specific releases into a full commercial release. There is no new functionality included in this release. The issues fixed in this release are listed in [“Issues Fixed” on page 7](#).

## 2 Compatibility

When the Service Kit is used for reading or programming a base station with modules that have earlier firmware versions, rules are applied to convert between new and old data versions, as explained in the Service Kit online Help.

The following table specifies all compatible configurations of the TB8100 base station. A compatible configuration is a combination of module hardware, module firmware, Service Kit software, and Calibration Kit software, where each part of the whole is compatible with all the other parts.

- Each row in the table identifies a compatible base station configuration.
- Each cell within a row contains the version number of the hardware, firmware, Service Kit software, or Calibration Kit software that is compatible with the other versions in the row. If a cell contains more than one version number, more than one version is compatible.
- Table footnotes indicate any restrictions imposed on a particular combination by the version of hardware, firmware, Service Kit software, or Calibration Kit software.
- Any other combination is not compatible and not supported.
- When servicing a module, you must use the version of Calibration Kit software that matches the version of firmware loaded into the module.

Base Station Hardware				Base Station Firmware			Service Kit Software	Calibration Kit Software
Reciter	PMU	PA	Control Panel	Reciter	PMU	PA		
00.07 00.06 00.05 00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.02 00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup> XBA2060	03.21	03.09	03.09	03.07	03.08
00.07 00.06 00.05 00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.02 00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup> XBA2060	03.07	02.09	03.08 03.07 03.06	03.07	03.07
00.07 00.06 00.05 00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.02 00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup> XBA2060	03.05	02.08	03.05	03.07 03.05	03.07 03.06
00.07 00.06 00.05 00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.02 00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup> XBA2060	03.04	02.08	03.04	03.07 03.05 03.04	03.07 03.06 03.04
00.05 00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup> XBA2060	03.02 03.01 03.00	02.08	03.00 02.09	03.07 03.05 03.04 03.01 03.00	03.07 03.06 03.04 03.00
00.05 00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.10	02.08	02.09	03.07 03.05 03.04 03.00 02.09	03.07 03.06 03.04 03.00 02.09
00.04 00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.03 00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.09	02.08	02.09	03.07 03.05 03.04 03.00 02.09	03.07 03.06 03.04 03.00 02.09
00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.07	02.08 02.07	02.07	03.07 03.05 03.04 03.00 02.09 02.07	03.07 03.06 03.04 03.00 02.07

Base Station Hardware				Base Station Firmware			Service Kit Software	Calibration Kit Software
Reciter	PMU	PA	Control Panel	Reciter	PMU	PA		
00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.05	02.06 02.05	02.05	03.07 03.05 03.04 03.00 02.09 02.07 02.05	03.07 03.06 03.04 03.00 02.05
00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.03	02.04 <sup>j</sup> 02.03	02.03	03.07 03.05 03.04 03.00 02.09 02.07 02.05 02.03	02.03
00.03 <sup>a</sup> 00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.02	02.03 02.02	02.02	03.07 03.05 03.04 03.00 02.09 02.07 02.05 02.03 02.02	02.02
00.02 <sup>a</sup> 00.01 <sup>a+b+c+d</sup>	00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00 <sup>g</sup>	XBA2010 XBA2020 <sup>h</sup> XBA2040 <sup>i</sup>	02.00	02.01 <sup>k</sup> 02.00 <sup>l</sup>	02.00	03.07 03.05 03.04 03.00 02.09 02.07 02.05 02.03 02.02 <sup>m</sup> 02.00	02.00
00.02 <sup>a+n</sup> 00.01 <sup>a+d</sup>	00.02 00.01 00.00 <sup>e+f</sup>	00.01 00.00	XBA2020 XBA2040 <sup>i</sup>	01.01 <sup>b+c</sup>	01.01 <sup>e</sup>	01.01 <sup>o</sup>	03.07 03.05 03.04 03.00 02.09 02.07 02.05 02.03 02.02 <sup>m</sup> 02.00 <sup>m</sup> 01.03 01.01	01.01

a. Extended bypass does not work.

b. Power saving does not work.

c. External reference changeover to internal reference does not work reliably.

d. Cannot be used with the TaitNet RS-232 or TaitNet Ethernet system interface boards.

- e. The Mains Failure diagnostic test does not work.
- f. The 12VDC power supply cannot exceed 16V (6 cells).
- g. Power saving does not work reliably: the base station may be unable to wake the PA up out of Deep Sleep mode.
- h. Using a XBA2020 control panel in a base station with Power Save increases power consumption by approximately 0.5W.
- i. Hardware-switchable dual base stations must use the control panel XBA2040 together with the subrack interconnect PCB XBAK22C2.
- j. Should not be used with a PMU running on a DC supply.
- k. 48VDC PMUs require PMU firmware version 02.01 or later.
- l. 24VDC PMUs require PMU firmware version 02.00 or later.
- m. Conversion rules apply. See the online Help for general information.
- n. DIP switches in the reciter must be set to positions that disable power saving if you downgrade a new reciter to old firmware (see TN-850 for details).
- o. If downgrading the PA firmware to version 01.01, make sure the PMU supplying the PA is running on AC power. Alternatively, use a bench power supply set to 28V to power the PA during download.



### **Important**

Power Saving is supported by firmware versions 02.00 and later, reciter hardware versions 00.02 and later, and PA hardware versions 00.01 and later. It is not supported by dual base stations.

B-band (VHF) operation is supported by firmware versions 02.02 and later, and reciter hardware version 00.03.

C-band (Band III) and K-band (800MHz) operation is supported by firmware versions 02.03 and later, and reciter hardware version 00.03.

H4-band (380MHz to 420MHz) operation is supported by firmware versions 03.04 and later, reciter hardware versions 00.05 and later, and PA hardware versions 00.02 and later.

L-band (900MHz) operation is supported by firmware versions 02.07 and later.

The TaitNet Ethernet system interface board and multi-reciter control panel are supported by reciter firmware versions 03.00 and later.

### 3 Upgrading to Service Kit Version 03.07

You must remove the old Service Kit version before installing the new version. Begin the installation in the usual way. In the Welcome screen, select Remove to remove all installed components. Then begin the installation again.



**Note** If you are upgrading from version 01.01, back up the connection definitions (SKLocal.mdb) before removing all installed components. Once the installation is complete, copy the backed up SKLocal.mdb files back into the directory where the Service Kit is installed.



**Note** A PC can only have one Service Kit version installed.

### 4 Upgrading or Downgrading Firmware

To upgrade or downgrade the firmware of any base station module, carry out the procedures described in “Upgrading Base Station Firmware” in the Service Kit online Help or User’s Manual. Note that you must use the latest version of the Service Kit software.

#### Reciter Recalibration

In some situations you must recalibrate the reciter when you upgrade or downgrade the reciter’s firmware, as described in the table below.

Upgrade or Downgrade	Procedures Required
upgrading the reciter firmware from version 02.00 or later to any later version	■ no recalibration is required
downgrading the reciter firmware from version 02.03 or later to version 02.02	■ automatically tune the frequency control loop (FCL)
■ upgrading the reciter firmware from version 01.01 to version 02.00 or later ■ downgrading the reciter firmware from version 02.02 to any earlier version	■ automatically tune the frequency control loop (FCL) ■ calibrate the FCL modulation ■ calibrate the VCO modulation

Refer to the Calibration Kit documentation for more details about tuning and recalibration procedures.



**Important** Always use the Calibration Kit software version compatible with the reciter firmware version you are upgrading or downgrading to (refer to “[Compatibility](#)” on page 2).

## 5 Documentation

The Spanish Installation and Operation Manual (MBA-00007-08) on the Product CD is a beta release. This is because the changes made to issue 7 have not been through a final review.

## 6 Issues Fixed

The following is the full list of known issues or limitations from previous versions that have been fixed in this release.

Tait Reference	Headline
00070616	Firmware upgrade causes glitch on PMU auxiliary supply
00070683	Digital Out 1 deactivates after a few seconds when 12V PA present
00070898	Momentary false PA alarms
00071709	Momentary false PMU alarms
00072987	String length checking for CCI commands
00074014	Changes to allow hardware channel change and Task Manager profile change to happen at the same time

## 7 Known Issues or Limitations

### **Calibration: PA Stage Bias error “not at this time” is described as “non-critical”**

Tait reference: 00046033 During PA Stage Bias calibration, if the Calibration Kit returns an error saying that “A (valid) command code has been received by the Base Station but it cannot be processed at this time”, then the stage bias calibration has not been completed. The Calibration Kit reports this error as non-critical, invites the user to Ignore it, and indicates that the stage bias has been calibrated – which it has not. The user should check the supply voltage, the supply voltage calibration, and the temperature of the PA, and try again.

### **Configuration: Disabled receiver shouldn't wake up in Power Saving mode when RF detected**

Tait reference: 00041429 During Sleep or Deep Sleep modes, if the receiver is disabled by the Task Manager but RF is present, the Base Station will wake up and the idle timer will be reset. The idle timer is also reset when RF is received but the receiver LCB and TTR paths are disabled.

### **Service Kit: A channel table exported with filter set to Pre/De-emph speech band is imported as flat speech band**

Tait reference: 00052984 If a channel table is exported with the filter set up for Pre/De-emph Speech Band, and is then imported into another configuration, the filter settings are changed to Flat Speech Band.

### **Service Kit: Do not install a new Service Kit version via Repair Option**

Tait reference: 00027076 The “Repair” option when installing new Service Kit software is not reliable. The correct procedure is to remove the Service Kit first by using either the “Remove” option from the Installation screen, or the “Add/Remove programs” from the Control Panel. Then install the new version (rebooting the PC when asked).



## 8 Publication Information

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18 March 2009	D Reynolds

## 9 Tait Contact Information

**Corporate Head Office  
New Zealand**      Tait Electronics Limited  
P.O. Box 1645  
Christchurch  
New Zealand

For the address and telephone number of regional offices, refer to the TaitWorld website:

Website: [www.taitworld.com](http://www.taitworld.com)

**Technical Support**      For assistance with specific technical issues, contact Technical Support:  
E-mail: [support@taitworld.com](mailto:support@taitworld.com)  
Website: [www.taitworld.com/technical](http://www.taitworld.com/technical)

