



**T830 Series II**  
**Base Station Equipment**  
**136-174MHz**

**Service Manual**

**Issue 202**

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### Corporate Head Office

Tait Electronics Ltd  
175 Roydvale Avenue  
P.O. Box 1645  
Christchurch  
New Zealand

### Customer Support Enquiries

Phone: 64 3 357 9991  
Fax: 64 3 358 0320  
E-mail: [support@taitworld.com](mailto:support@taitworld.com)

### Internet

<http://www.taitworld.com>

### New Zealand

Tait Communications Ltd  
540 Wairakei Road  
P.O. Box 1185  
Christchurch  
Phone: 64 3 357 2750  
Fax: 64 3 358 2029  
E-mail: [headoffice@tcl.tait.co.nz](mailto:headoffice@tcl.tait.co.nz)

### Australia

Tait Electronics (Aust) Pty Ltd  
186 Granite Street  
Geebung  
Queensland 4034  
P.O. Box 679  
Virginia  
Queensland 4014  
Australia  
Phone: 61 7 3865 7799  
Toll Free: 1 300 304 344  
Fax: 61 7 3865 7990  
E-mail: [australia@taitworld.com](mailto:australia@taitworld.com)

### North Asia

#### Regional Head Office Hong Kong

Tait Mobile Radio (HK) Ltd  
Unit 2216, North Tower  
Concordia Plaza  
No. 1 Science Museum Road  
Tsim Sha Tsui East  
Kowloon  
Phone: 852 2369 3040  
Fax: 852 2369 3009  
E-mail: [hongkong@taitworld.com](mailto:hongkong@taitworld.com)

#### Beijing

Tait Mobile Radio (HK) Ltd  
Beijing Representative Office  
Room 610, Tower 2  
Beijing Henderson Centre  
No. 18 Jianguomennei Da Jie  
Doncheng District  
Beijing  
China 100005  
Phone: 86 10 6518 6290  
Fax: 86 10 6518 6296  
E-mail: [beijing@taitworld.com](mailto:beijing@taitworld.com)

#### Taiwan

Tait Mobile Radio (Taiwan) Ltd  
5FL, No. 159, Keelung Road  
Sec. 1  
Taipei 110  
Taiwan  
Phone: 886 2 2768 6600  
Fax: 886 2 2761 9970  
E-mail: [taiwan@taitworld.com](mailto:taiwan@taitworld.com)

### South East Asia

#### Regional Head Office Singapore

Tait Electronics (Far East) Pte Ltd  
491B River Valley Road  
#09-02 Valley Point Office Tower  
Singapore 248373  
Phone: 65 471 2688  
Fax: 65 479 7778  
E-mail: [singapore@taitworld.com](mailto:singapore@taitworld.com)

#### Thailand

Tait Mobile Radio Ltd  
14/1 Suwan Tower  
Third Floor  
North Sathorn Road  
Soi Saladaeng 1  
Bangrak  
Bangkok 10500  
Thailand  
Phone: 662 267 6290  
Fax: 662 267 6293  
E-mail: [thailand@taitworld.com](mailto:thailand@taitworld.com)

### Europe

#### Regional Head Office United Kingdom

Tait Europe Ltd  
Ermine Business Park  
Ermine Road  
Huntingdon  
Cambridgeshire PE29 6WT  
United Kingdom  
Phone: 44 1480 52 255  
Fax: 44 1480 411 996  
E-mail: [unitedkingdom@taitworld.com](mailto:unitedkingdom@taitworld.com)

#### France

Antenne Française  
E-mail: [france@taitworld.com](mailto:france@taitworld.com)

#### Germany

Zweigstelle Deutschland  
E-mail: [germany@taitworld.com](mailto:germany@taitworld.com)

### North America

#### Regional Head Office Canada

Tait Mobile Radio Inc.  
Unit 5, 158 Anderson Avenue  
Markham  
Ontario L6E 1A9  
Canada  
Phone: 1 905 472 1100  
Toll Free: 1 800 890 TAIT (8248)  
Fax: 1 905 472 5300  
E-mail: [canada@taitworld.com](mailto:canada@taitworld.com)

#### USA

Toll Free: 1 800 890 TAIT (8248)  
E-mail: [usa@taitworld.com](mailto:usa@taitworld.com)

### Latin America

E-mail: [latinamerica@taitworld.com](mailto:latinamerica@taitworld.com)

## About This Manual

### Scope

This manual contains general, technical and servicing information on T830 Series II 25W, 50W and 100W base stations which comprise the following equipment:

|                   |  |
|-------------------|--|
| 25W base station  | T835 receiver<br>T836 25W transmitter                      |
| 50W base station  | T835 receiver<br>T837 exciter<br>T838 50W power amplifier  |
| 100W base station | T835 receiver<br>T837 exciter<br>T839 100W power amplifier |

### Format

We have published this manual in a ring binder so that “revision packages” containing additional information pertaining to new issues of PCBs can be added as required.

### Revision Packages

Revision packages will normally be published to coincide with the release of information on a new PCB, and may also contain additions or corrections pertaining to other parts of the manual.

You may order as many packages as you require from your local Tait Dealer or Customer Service Organisation. Revision packages are supplied ready-punched for inclusion in your manual.

### Revision Control

Each page in this manual has a date of issue. This is to comply with various Quality Standards, but will also serve to identify which pages have been updated and when. Each page and its publication date is listed in the “List of Effective Pages”, and a new list containing any new/revised pages and their publication dates will be sent with each revision package.

Any portion of text that has been changed is marked by a vertical line (as shown at left) in the outer margin of the page or column. Where the removal of an entire paragraph means there is no text left to mark, an arrow (as shown at left) will appear in the outer margin. The number beside the arrow will indicate how many paragraphs have been deleted. Changes to diagrams that cannot be marked by these methods will be explained in an Amendments Box added to the diagram.

The manual issue and revision status are indicated by the last three digits of the manual product code. These digits start at 200 and will increment through 201, 202, 203, etc., as revision packages are published, e.g:

Thus, issue 203 indicates the third revision to issue 2 and means that three packages should have been added to the manual. The issue digit will only change if there is a major product revision, or if the number of revision packages to be included means that the manual becomes difficult to use, at which point a new issue manual will be published in a new ring binder.

### PCB Information

PCB information is provided for all current issue PCBs, as well as all previous issue PCBs manufactured in production quantities, and is grouped according to PCB. Thus, you will find the parts list, grid reference index (if necessary), PCB layouts and circuit diagram(s) for each individual PCB grouped together.

### Errors

If you find an error in this manual, or have a suggestion on how it might be improved, please do not hesitate to contact Customer Support, Tait Electronics Ltd, Christchurch, New Zealand (full contact details are on page 2).

## Updating Equipment And Manuals

In the interests of improving performance, reliability or servicing, Tait Electronics Ltd reserve the right to update their equipment and/or manuals without prior notice.

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You can order additional copies of this service manual from your nearest Tait Dealer or Customer Service Organisation. When ordering, make sure you quote the correct Tait product code ("M" number). Note that only the latest issue of the manual will be available for order.

## Publication Information

| T830 Series II Service Manual |                  |              |                               |
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| Issue                         | Publication Date | Product Code | Incorporates Revision Package |
| 200                           | April 1998       | M830-00-200  | —                             |
| 201                           | August 1999      | M830-00-201  | R830-00-201                   |
| 202                           | March 2001       | M830-00-202  | R830-00-202                   |

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| 1.4           | 30/04/98 (fold-out)         | 5.2.3       | 31/03/01                    |
| 1.5           | 30/04/98                    | 5.2.4       | 30/04/98                    |
| 1.6           | 31/03/01                    | 5.2.5       | 30/04/98                    |
| 1.7           | 31/03/01                    | 5.2.6       | 30/04/98                    |
| 1.8           | 31/03/01                    | 5.2.7       | 30/04/98 (fold-out)         |
| 1.9           | 31/03/01                    | 5.2.8       | 30/04/98 (fold-out) (blank) |
| 1.10          | 31/03/01                    | 5.2.9       | 30/04/98                    |
|               |                             | 5.2.10      | 30/04/98                    |
| 2.1           | 23/07/99                    | 5.2.11      | 30/04/98 (fold-out)         |
| 2.2           | 30/04/98 (blank)            | 5.2.12      | 31/03/01 (fold-out)         |
| 2.3           | 31/03/01                    | 5.2.13      | 31/03/01 (fold-out)         |
| 2.4           | 30/04/98                    | 5.2.14      | 30/04/98 (fold-out)         |
| 2.5           | 23/07/99                    |             |                             |
| 2.6           | 30/04/98                    | 5.3.1       | 31/03/01                    |

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|---------------|-----------------------------|---------------|---------------------|
| 5.3.2         | 30/04/98 (blank)            | 1.1           | 23/07/99 (fold-out) |
| 5.3.3         | 31/03/01                    | 1.2           | 23/07/99 (fold-out) |
| 5.3.4         | 31/03/01                    |               |                     |
| 5.3.5         | 31/03/01                    | 2.1           | 23/07/99 (fold-out) |
| 5.3.6         | 31/03/01                    | 2.2           | 31/03/01 (fold-out) |
| 5.3.7         | 31/03/01                    |               |                     |
| 5.3.8         | 31/03/01                    | 3.1           | 23/07/99 (fold-out) |
| 5.3.9         | 31/03/01 (fold-out)         | 3.2           | 31/03/01 (fold-out) |
| 5.3.10        | 31/03/01 (fold-out) (blank) |               |                     |
| 5.3.11        | 31/03/01                    | 4.1           | 23/07/99            |
| 5.3.12        | 31/03/01                    | 4.2           | 23/07/99            |
| 5.3.13        | 31/03/01 (fold-out)         |               |                     |
| 5.3.14        | 31/03/01 (fold-out)         |               |                     |
| 5.3.15        | 31/03/01 (fold-out)         |               |                     |
| 5.3.16        | 31/03/01 (fold-out)         |               |                     |
| <b>Part E</b> |                             | <b>Part G</b> |                     |
| I             | 31/03/01                    | I             | 30/04/98            |
| II            | 30/04/98 (blank)            | II            | 30/04/98            |
| 1.1           | 30/04/98                    | 1.1           | 23/07/99            |
| 1.2           | 31/03/01                    | 1.2           | 30/04/98            |
| 1.3           | 30/04/98                    | 1.3           | 31/03/01            |
| 1.4           | 30/04/98 (blank)            | 1.4           | 30/04/98 (blank)    |
| 2.1           | 31/03/01                    | 2.1           | 30/04/98            |
| 2.2           | 30/04/98 (blank)            | 2.2           | 30/04/98            |
| 2.3           | 31/03/01                    | 2.3           | 30/04/98            |
| 2.4           | 30/04/98                    | 2.4           | 30/04/98 (blank)    |
| 2.5           | 30/04/98                    | 3.1           | 30/04/98            |
| 2.6           | 30/04/98                    | 3.2           | 30/04/98 (blank)    |
| 2.7           | 30/04/98                    | 4.1           | 30/04/98            |
| 2.8           | 30/04/98                    | 4.2           | 30/04/98            |
| 2.9           | 30/04/98 (fold-out)         | 5.1           | 30/04/98            |
| 2.10          | 30/04/98 (fold-out) (blank) | 5.2           | 30/04/98            |
| 2.11          | 31/03/01                    |               |                     |
| 2.12          | 31/03/01                    | <b>Part H</b> |                     |
| 2.13          | 31/03/01                    | I             | 23/07/99            |
| 2.14          | 31/03/01                    | II            | 30/04/98 (blank)    |
| 2.15          | 31/03/01                    | 1             | 23/07/99            |
| 2.16          | 31/03/01                    | 2             | 30/04/98            |
| 2.17          | 31/03/01 (fold-out)         | 3             | 31/03/01            |
| 2.18          | 31/03/01 (fold-out) (blank) | 4             | 30/04/98            |
|               |                             | 5             | 23/07/99            |
|               |                             | 6             | 23/07/99            |
|               |                             | 7             | 23/07/99            |
|               |                             | 8             | 23/07/99            |
|               |                             | 9             | 23/07/99            |
| <b>Part F</b> |                             |               |                     |
| I             | 23/07/99                    |               |                     |
| II            | 23/07/99                    |               |                     |

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|-------------|-------------------|-------------|-------------------|
| 10          | 23/07/99          |             |                   |
| 11          | 23/07/99          |             |                   |
| 12          | 23/07/99          |             |                   |
| 13          | 23/07/99          |             |                   |
| 14          | 23/07/99          |             |                   |

**Part I**

|     |                  |  |  |
|-----|------------------|--|--|
| I   | 30/04/98         |  |  |
| II  | 30/04/98 (blank) |  |  |
| 1.1 | 30/04/98         |  |  |
| 1.2 | 30/04/98 (blank) |  |  |
| 2.1 | 23/07/99         |  |  |
| 2.2 | 30/04/98         |  |  |
| 2.3 | 30/04/98         |  |  |
| 2.4 | 30/04/98         |  |  |
| 2.5 | 23/07/99         |  |  |
| 2.6 | 30/04/98         |  |  |
| 2.7 | 30/04/98         |  |  |
| 2.8 | 30/04/98 (blank) |  |  |
| 3.1 | 23/07/99         |  |  |
| 3.2 | 31/03/01         |  |  |
| 3.3 | 31/03/01         |  |  |
| 3.4 | 30/04/98         |  |  |
| 3.5 | 30/04/98         |  |  |
| 3.6 | 30/04/98 (blank) |  |  |

