



AUSTRALIAN RAIL TRACK CORPORATION

Certificate No.: **S-02-10-106**

## NEW EQUIPMENT & SYSTEM APPROVAL CERTIFICATE

**Approval date:** 8 November 2010

**Approved by:** ARTC Risk & Safety Committee

**Report no.:** TAS 02-1008-IR106

**Report date:** 27 September 2010

This certificate is issued to:

**Supplier:** **Invensys Rail Pty Ltd**

In respect of:

**Manufacturer:** Invensys Rail Pty Ltd  
179-185 Normanby Rd  
South Melbourne  
Victoria 3205

**Product description:** **INVENSYS RM4 TYPE 92 LED SIGNAL**

**Item identification:** See approved item list for certificate S-02-10-106

**Application:** LED signals for EC5 interlocking

**Relevant Standards:** SPS 11 Light Signals  
SPS 02 Environmental Conditions

- Conditions of Approval:**
1. For use in accordance with ARTC signals construction standards and standard typical circuits only.
  2. Not suitable for use in tunnels.
  3. For use with VHLC and EC5 interlockings only.
  4. All RM4 Type 92 LED light units shall be scheduled for routine replacement after 12 years in service.
  5. Maintenance schedules for sites with these units installed shall include requirements to note the number of failed LEDs in each aspect and arrange for replacement when 60% failed (before failure alarm is activated).
  6. Only components from the list in **Approved Item List** may be utilised.
  7. All main signal heads at a site (included in the same circuit book), which use LED signal light units, shall use units from one supplier's range.

*A general condition of approval is that the supplier remains accredited to ISO 9001 specifically for these products and ARTC is advised on a 12 monthly basis that accreditation is current. ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011.*

*Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid certificate.*

**Issue date:** 30/11/2010

**Expiry date:**

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**Issued by:**

John Furness  
ARTC Manager Standards

## NEW EQUIPMENT & SYSTEM APPROVAL - APPROVED ITEM LIST

**Reference no.:** TAS 02-1008-IR106  
**Date:** 27 September 2010  
**Product description:** **INVENSYS RM4 TYPE 92 LED SIGNAL**  
**Certificate no.:** **S-02-10-106**

The following lists the individual items (by catalogue number) are approved for use on ARTC infrastructure under the above referenced New Equipment & System Approval Certificate number, subject to any conditions shown on that Certificate and the Conditions of Use shown against individual items.

Catalogue No.	Item Type	Description	Conditions of Use
TR3-YCFB-501B-92 *[5517/12YMR92]	Shunt Signal	LED module yellow 140 mm	12 V DC VHLC
RM4-GCFB-75B-92G *[5518/12GIR92]	Main Line Signal	LED module green 212 mm	12 V DC VHLC
RM4-YCFB-85B-92G *[5518/12YLR92]	Main Line Signal	LED module yellow 212 mm	12 V DC VHLC
RM4-RCFB-75B-92G *[5518/12RIR92]	Main Line Signal	LED module red 212 mm	12 V DC VHLC
RM4-WCFB-75B-92G *[ To be provided]	Main Line Signal	LED module white V and S stencilled 212 mm	12 V DC VHLC
RM4-GCFB-25B-92G *[5518/12GMR92]	Main Line Signal	LED module green 212 mm	12 V DC VHLC
RM4-YCFB-43B-92G *[5518/12YMR92]	Main Line Signal	LED module yellow 212 mm	12 V DC VHLC
RM4-RCFB-25B-92G *[5518/12RMR92]	Main Line Signal	LED module red 212 mm	12 V DC VHLC
RM4-WCFB-25B-92G *[5518/12WMR92]	Main Line Signal	LED module white 212 mm	12 V DC VHLC
3210116501 DTF	Subsidiary Signal	LED module white '65'	12 V DC VHLC

\* New part number being introduced by Invensys Rail.