

## ADIF - Rail network control room

### OVERVIEW

**PROJECT LOCATION**  
Miranda de Ebro, Spain

**ENGINEERED BY**  
Mitsubishi Electric Spain

**CUSTOMER**  
Administrador de Infraestructuras  
Ferrovias (ADIF)

**COMPLETION DATE**  
January 2008

**PROJECT DATA**  
State of the art rail traffic  
management centre for northern  
Spain.

**APPLICATION**  
Control room  
Rail management  
Traffic management  
Security & surveillance  
Crisis management

**PRODUCTS USED**  
36 x VS-67PH50U  
Jupiter 980 Controller

**PRIMARY CONTACT**  
(UK and UAE)

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### THE PROJECT

ADIF (Administrador de Infraestructuras Ferroviarias) is the organisation in charge of building new railway lines and the maintenance of the railway infrastructure across the whole of Spain. Rail operations across the northern region of the country are managed by a new state of the art control centre at Miranda de Ebro. Given the control room's vital role in managing rail traffic across a busy network, ADIF's primary requirement for its control room screen was for a reliable and robust display wall system capable of 24/7 operation. In addition to a high degree of reliability from the displays, the ADIF required complete redundancy of the control processors. With its reputation for excellent reliability and build quality, Mitsubishi Electric was the perfect choice..

### THE SOLUTION

Mitsubishi Electric Spain provided a complete display solution based on 36, 67" SXGA+ display wall cubes combined with a Jupiter 980 processor. All the display cubes were fitted with the Speed Swap™ automatic lamp change system, which is designed to give an extra level of confidence in mission-critical applications such as this. In the event of a lamp failure, a new lamp is lit and moved into position automatically within 10 seconds to replace the failed unit.

The Mitsubishi system incorporates many advanced features such as Dynamic Brightness Balancing and Colour Space Control to ensure consistent and accurate colour reproduction across the whole display. The system delivers bright, crisp images, despite the relatively high ambient light levels in the room, enabling operators to work effectively in a comfortable, naturally-lit environment.

The Jupiter processor was fitted with multiple redundant power supplies and hard drives distributed in RAID 5. Additional redundancy is delivered by the back-up routing of signals directly to the display wall cubes, handled via outboard signal distribution. This allows the display wall to still function, even in the unlikely event of a complete processor failure

A comprehensive product range and in-house technical expertise allowed Mitsubishi Electric Spain to deliver a specific, locally managed solution that fulfilled completely the client requirements for a robust display wall system of the highest quality.

# ADIF

## Rail network control room



Mitsubishi Electric display wall systems are the preferred choice of many of Europe's specialist systems integrators

### SPECIFICATIONS

<b>Model</b>	<b>VS-67PH50U</b>
<b>Technology</b>	1 Chip DLP™(0.95" DMD 1-chip)
<b>Native Resolution</b>	SXGA + (1400 x 1050 pixels)
<b>Size</b>	67" (1359 mm x 1019mm)
<b>Brightness</b>	Bright mode: 500cd/m <sup>2</sup> (typ.) Normal mode: 400cd/m <sup>2</sup> (typ.)
<b>Contrast Ratio</b>	1800:1 (typ.)
<b>Colour Reproduction</b>	16.7 million
<b>Input Scanning</b>	Horizontal: 31.5kHz - 78kHz Vertical: 49.5Hz - 85Hz
<b>Analogue RGB</b>	RGB signal level: 0.7Vp-p 75Ω Synchronous: TTL level Sync on green
<b>Lamp</b>	High pressure lamp 6,000 hours (bright mode) 10,000 hours (normal mode)
<b>Control I/O</b>	RS-232C: D-sub 9 pins Control link: D-sub 9 pins x 2 (I/O) Wire remote: 3.5mm jack IR Receiver
<b>Weight</b>	91kg
<b>Power consumption</b>	195W(Typ)



Mitsubishi Electric helps ADIF manage rail operations across the northern region of Spain from its new state of the art control centre at Miranda de Ebro

### MITSUBISHI ELECTRIC DISPLAY WALL

The perfect choice for command & control display systems.

Mitsubishi Electric Display Wall is the preferred choice of many of Europe's specialist systems integrators for its performance, longevity, reliability and ease of maintenance in control room applications

Mitsubishi's patented Colour Space Control and dynamic brightness balancing ensure superb clarity in use, while optional features such as automatic lamp changing and automatic colour wheel calibration help to ensure 24/7 reliability and resilience in mission-critical applications.

There are now over 20 product variants in the Display Wall range, meaning that whatever the application, there is a Display Wall product ideally suited to the task. Call us or visit our website to find out more about Display Wall in action.



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