LVNL Schiphol Switch
GF 1030 SW

LVNL, the Netherland's Air Navigation Service Provider operates the Area Control Centre at Schiphol.

As part of the on-going investment at Schiphol ATC Centre, LVNL, the Netherlands Air Traffic Service provider have selected the Thruput multipurpose switch solution to enable seamless operation between their existing Main and new Backup ATC systems.

Following functional trials in June 2011 Thruput were contracted to provide a fully integrated switch solution that handles multiple video data streams (including 2K x 2K digital), serial data, mouse and keyboard data sets from a single user control.

The contract required a custom mechanical arrangement to accommodate the existing console structure, equipment mounting and access for display handling. The resulting low profile, high strength switch solution is shown below:

Specification

User outputs

1 x Dual link DVI (2048 x 2048 resolution)

2 x Analogue VGA displays

2 x RS232 touch screens

2 x USB (left and right tracker ball)

Data inputs

2 x Dual link DVI (2048 x 2048 resolution)

4 x Analogue VGA

4 x RS232

4 x USB

Control

Colour coded, console mount switch, with status feedback.

Mechanical

– Custom case, required to fit existing console furniture.

– Available space restricted by access requirements of pre-existing display handling trolley.

– Low profile unit designed to support a Sun Blade 2500 workstation:

    Height: 66 mm

    Width: 560 mm

    Depth: 250 mm

– Expansion capability for future video and serial data recording (designed to accept Thruput Sentinel technology).

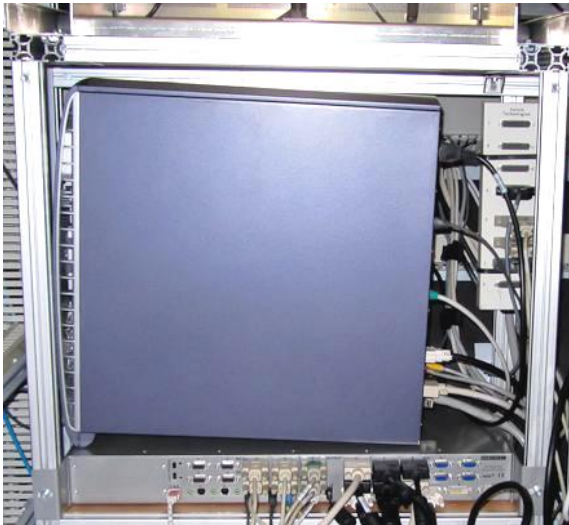*Front view of the GF 1030 SW multipurpose switch.*

Top left: The console mounted switch of the GF 1030 SW has colour coded, console mounted switches:

Left: Main System (green).

Right: Backup system (amber).

THRUPUT

Trial installation of the first production unit, showing the Sun Blade 2500 (top) and the GF 1030 SW (bottom) within the console structure.
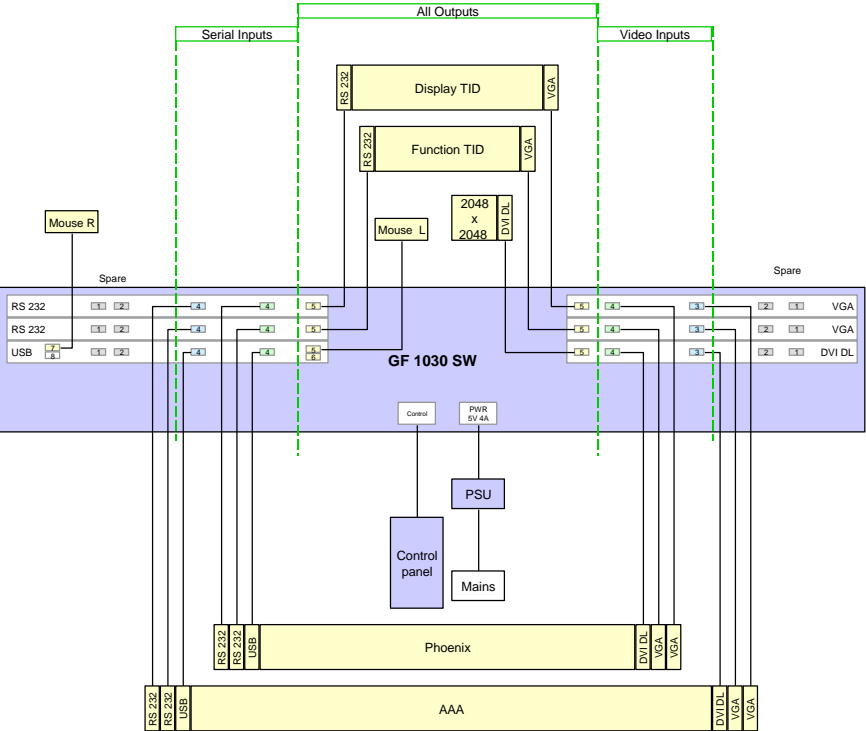
Custom switch service

Thruput Limited provides a custom design and manufacturing service for clients with specific requirements of their switch technology.

The most important stage in this process is to understand the customer requirements and the following checklist is helpful:

Inputs	Qty	Type	Resolution	
			X	Y
Video				
Video				
Video				
RS232				
USB				
PS2				
Other				

Outputs	Qty	Type	Resolution	
			X	Y
Video				
Video				
Video				
RS232				
USB				
PS2				
Other				

Mechanical		Size		
		X	Y	Z
Units				

System architecture for the LVNL Multipurpose switch. The key features for LVNL included:

Retrofitting the switch assembly to the existing consoles, which required a low profile design, with the mechanical strength to support a Sun blade 2500 workstation.

Provision of a status signal to each workstation.

Console mounted remote control with status feedback.