

CS-4LS

-Prototype-

Certi Systems



Figure 1: CS-4LS front view

Version 1.1 – 27/09/2018

Description:

Designed and assembled by Certi Systems, CS-4LS is a device capable of simplifying the switching of analog telephone lines between redundant voice routers. CS-4LS is also able of redirecting the telephone lines by bypassing the voice routers, in case of a rack power failure.

Features:

- Rackable 2U 19" enclosure.
- 4 Analog lines capacity.
- High reliability-bifurcated contacts Japanese signal relays.
- Selective 3-position toggle switch (Router A, Router B, Direct) with status LEDs.
-Direct position allows to bypass the routers-
- Fused 10A - 240Vac power input, IEC 60320-C14 socket.
- Dual-fan system with a temperature speed controller.



Figure 2: CS-4LS back view

Working Modes:

A Typical interconnection; while noting that CS-4LS could handle 4 Telephone lines simultaneously.

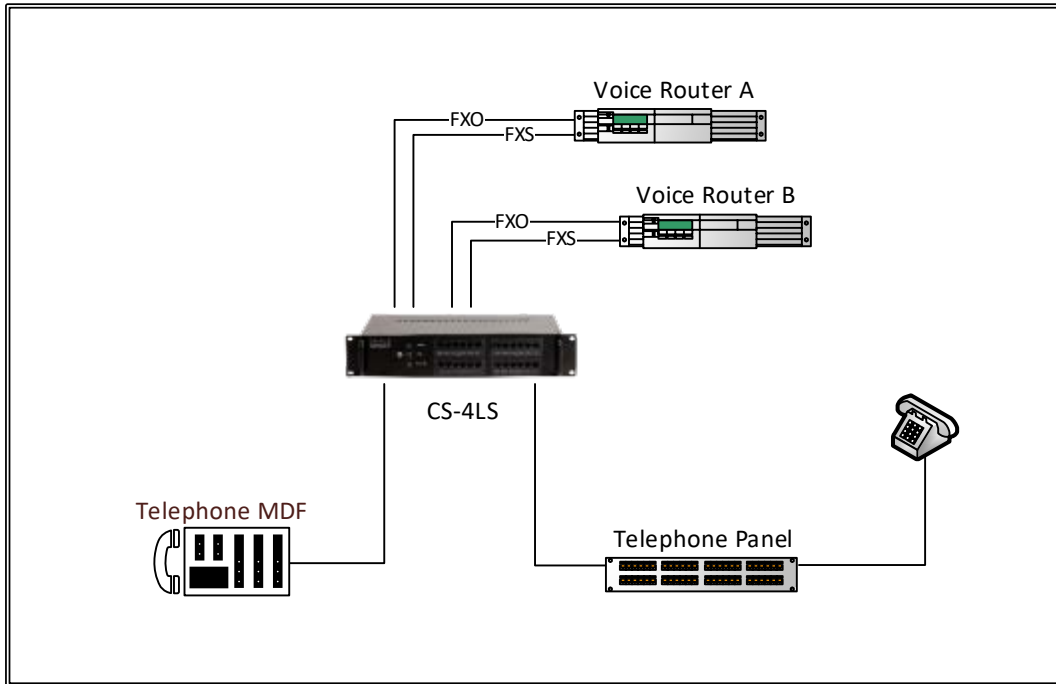


Figure 3: Typical Interconnection.

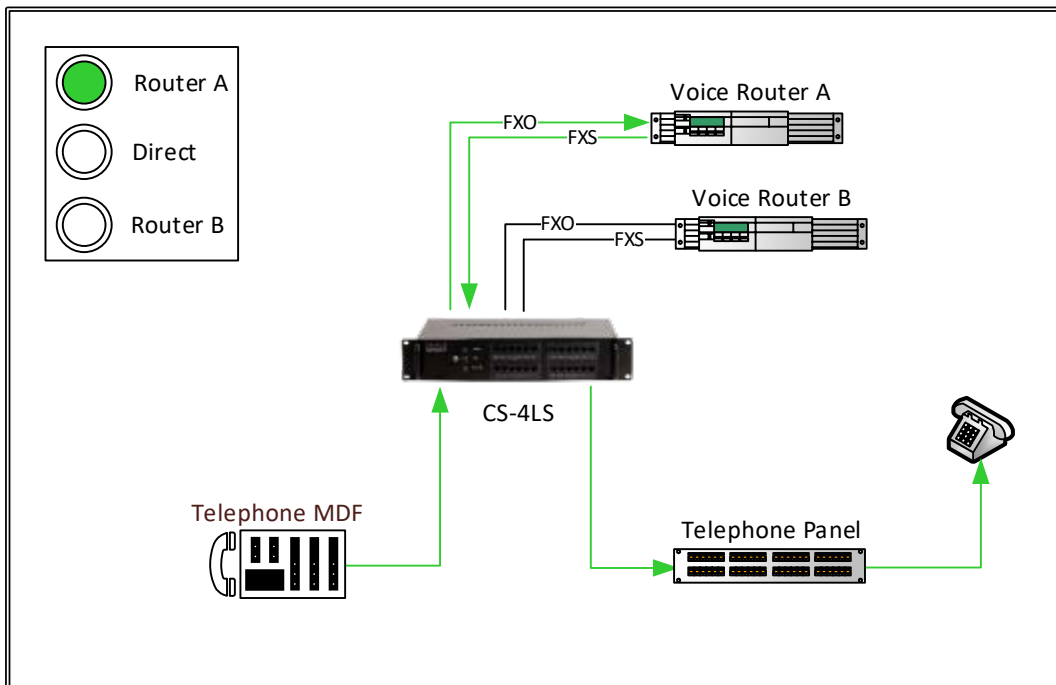


Figure 4: Lines redirection when "Router A" is selected

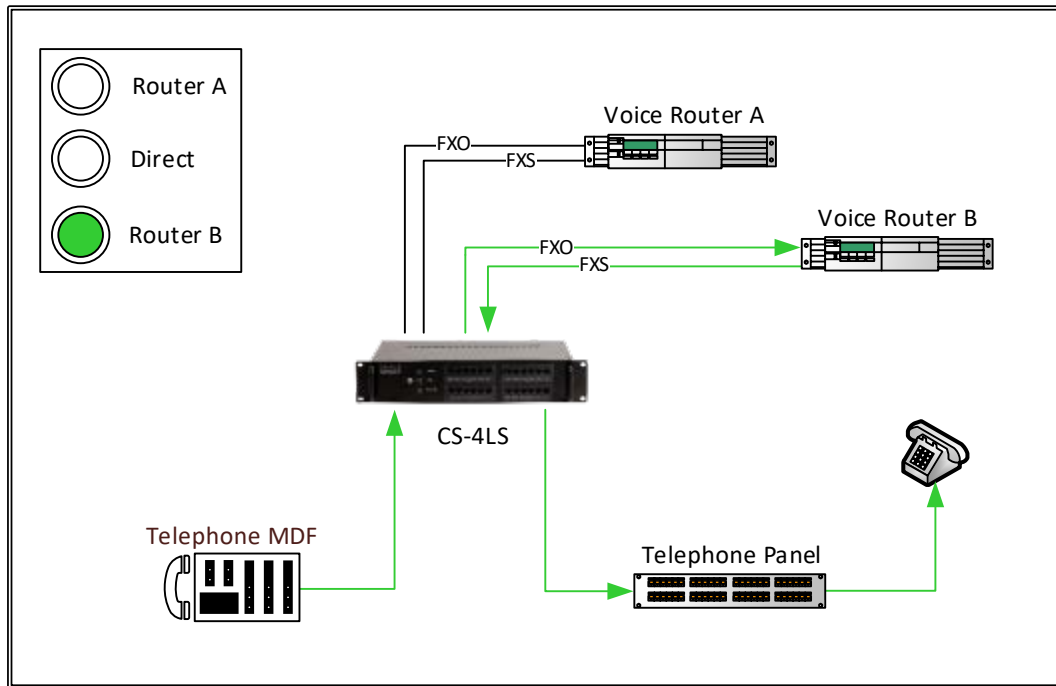


Figure 5: Lines redirection when "Router B" is selected

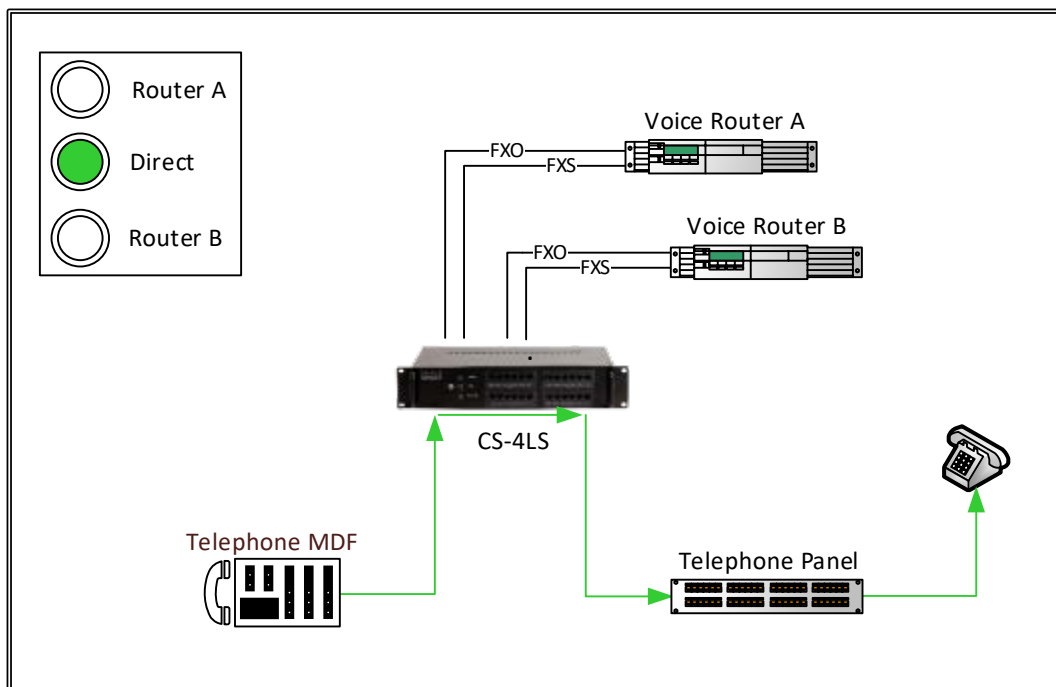


Figure 6: Lines redirection when "Direct" is selected, or in the event of a power failure*

Characteristic Parameters:

CS-4LS Electrical Characteristics	
Operating voltage	240VAC
Fuse	10A
DC Inversion	12VDC, 4.2A
Power Consumption	12W

Signal Relays Characteristics (per line)	
Operating voltage	12V
Relays type	RY12W-K
Operating voltage range	8.5~15.6VDC
Operating current (all relay action)	120mA
Operating current (all relay no action)	0mA
Output (relay switch) contact rating	
Max. Carrying current	1.25A
Max. Switching voltage	120VAC, 60VDC
Max. Switching power	60VA / 24W
Max. Switching current	1A
Min. Switching load	0.01 mA, 10 mVDC
Other data	
Capacitance (at 10MHz)	Approximately 0.9 pF (open contacts), 1.4pF (adjacent contacts) Approximately 1.9 pF (between coil and contacts)
Life	Mechanical: Min. 20 x 10 ⁶ operations
	Electrical (at contact rating): Min. 200 x 10 ³ operations (0.5A, 120VAC) Min. 500 x 10 ³ operations (1A, 24VDC)