

S0 Port Termination Rules

The most important rule with internal S₀ port wiring whether onboard the PBX or on an expansion module to remember is termination:

EACH internal So2 (ISDN2) Bus MUST have 2 end of line termination points.

Failure to apply the above rule using the instructions set out below and those in your manuals will result in either no operation at all or possibly worst intermittent or unreliable operation.

Correct Termination consists of 2 sets of 100Ohm terminating points applied (these can be :- onboard the module or PBX, a plug in adapter (RJ45 plug to RJ45 socket) or a RJ45 with a blue shutter).

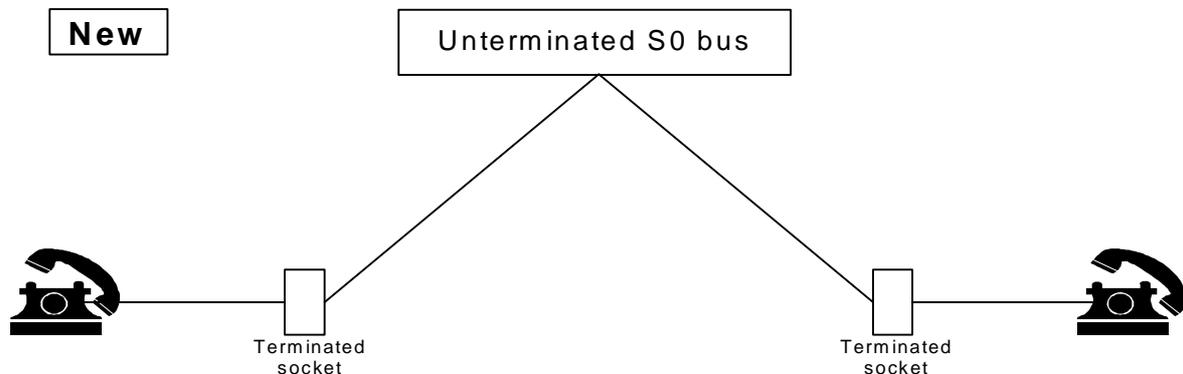
(According to the ISDN standards ISDN TAs, phones, routers etc should not be terminated so these do NOT usually count as termination points, but some do break this standard and so add termination. Check with your vendor).

In the ideal situation the termination will be at the two ends of the S₀ Bus (complete cable run). (Line cords up to approx. 2m are not included in at the end of bus calculations)

The options for wiring are :-

Star wiring: (often used for Cat5 structured installations) (each cable leg should total no more than 200m).

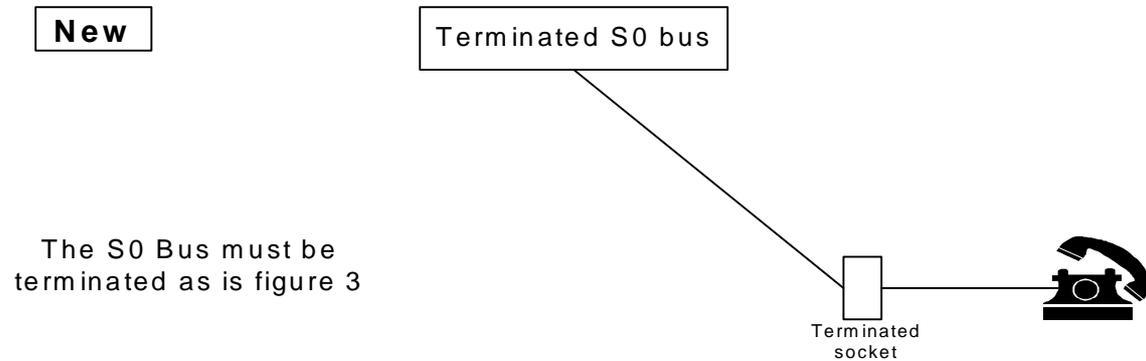
From the S₀ Port on the PBX* or module the S₀ Bus (cables) are run in **two** directions to serve outlets in different locations. At the two furthest points on each S₀ Bus there must be termination, even if there is no device on one or both of the outlets.



(If wired to a patch panel but not wired out to a wall outlet it must still be terminated at the patch panel according to the 2 terminations per bus rule).

Bus wiring: (often used for traditionally wired installations)

From the S₀ Port on the PBX* or module the S₀ Bus (cable) is run in one direction to serve one or more outlets (each one wired one after the other). At the furthest outlet on the S₀ Bus there must be termination, even if there is no device on it. The port must also be terminated*. The method for this depends on the type of port, please see below for types of S₀ Port.



*Important Please: see next page for types of S₀ port on the PBX and modules and how termination is applied or removed. Particularly if connecting to an S₀ port on a C88m or Old S₀ module

The same rules apply to external termination of BT lines but in practice usually just leave the termination on at both the module and BT's NT point.