



A Guide for Using the FxB Protocol

A guide for using the Fox-Bus (FxB) serial protocol
with translators and 1-Wire™ devices.

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February 17, 2005

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Using Fox-Bus (FxB) where 1-Wire Fails

The FxB bus protocol is a bi-directional serial network protocol that can be translated to 1-Wire™ at the end of the bus to accommodate 1-Wire™ components. This allows 1-Wire™ devices and software to work using FxB as if the entire system was 1-Wire™. The added reliability and robustness of FxB

The master-end (computer-end) interface must be a LINK intelligent master-end interface (www.iButtonLink.com) with FxB software loaded into it. It will then generate the FxB protocol instead of the 1-Wire protocol on the bus.

The slave end must have a small device called a *translator* in line to convert the FxB protocol into 1-Wire™. By locating this converter very near the 1-Wire devices, the problems and sensitivities of the 1-Wire™ bus are overcome.

1-Wire™ software, for the most part, will not know that the bus is not 1-Wire throughout.

In the future, FxB bus slaves will become available that perform many tasks without requiring translators.

The following diagrams show the topologies of 1-Wire™, translated FxB and pure FxB networks.

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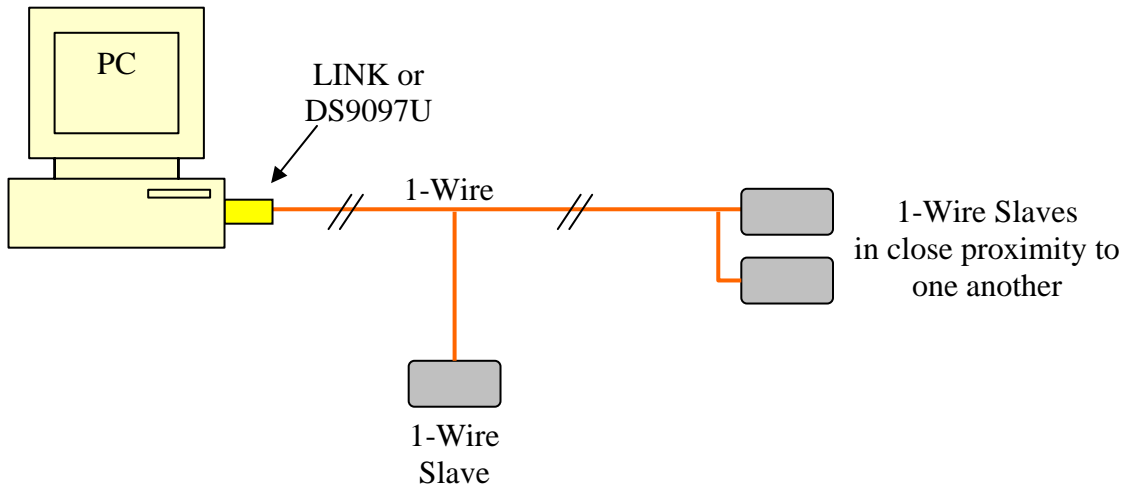


Figure 1 – Typical 1-Wire Topology

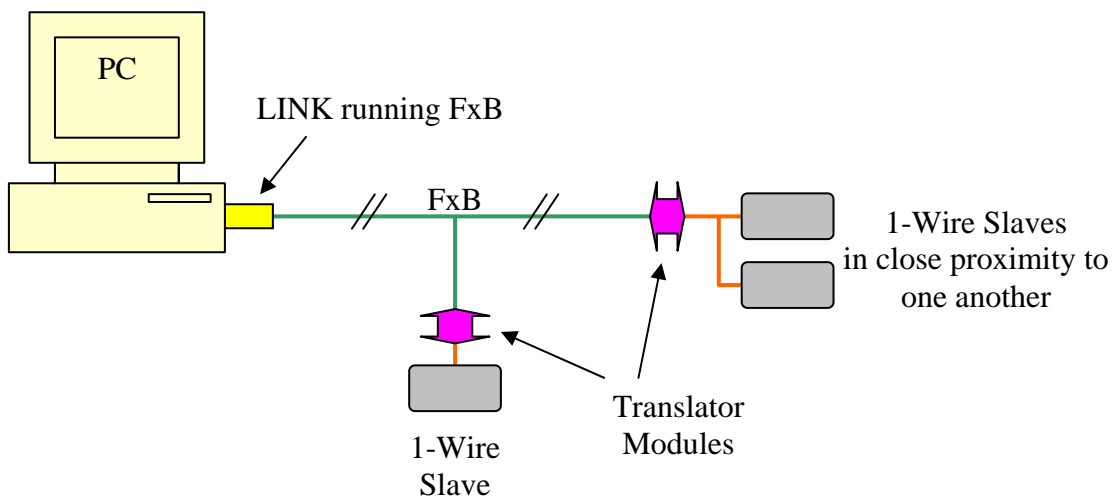


Figure 2 – Bus Converted to FxB Using Translators

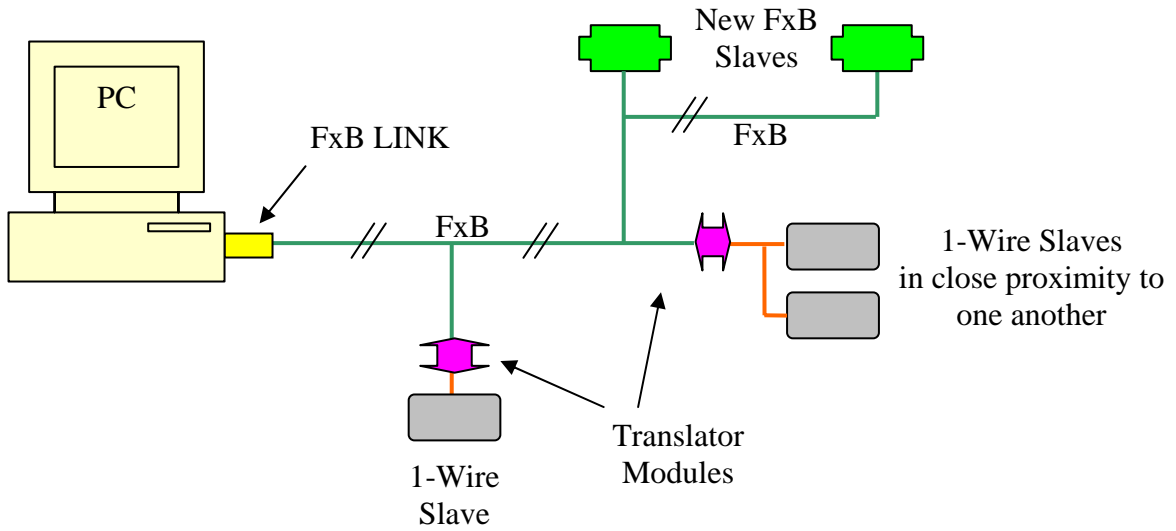


Figure 3 – FxB and 1-Wire Slaves Using Translators

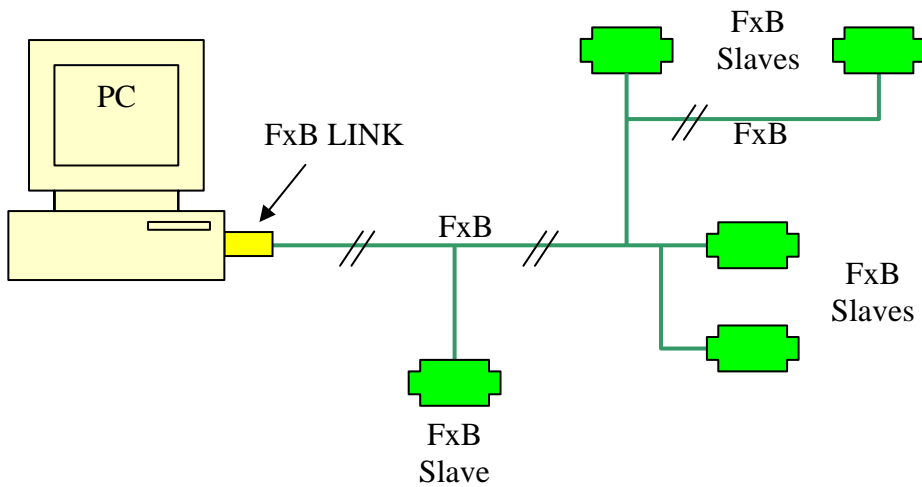


Figure 4 – Totally FxB Network