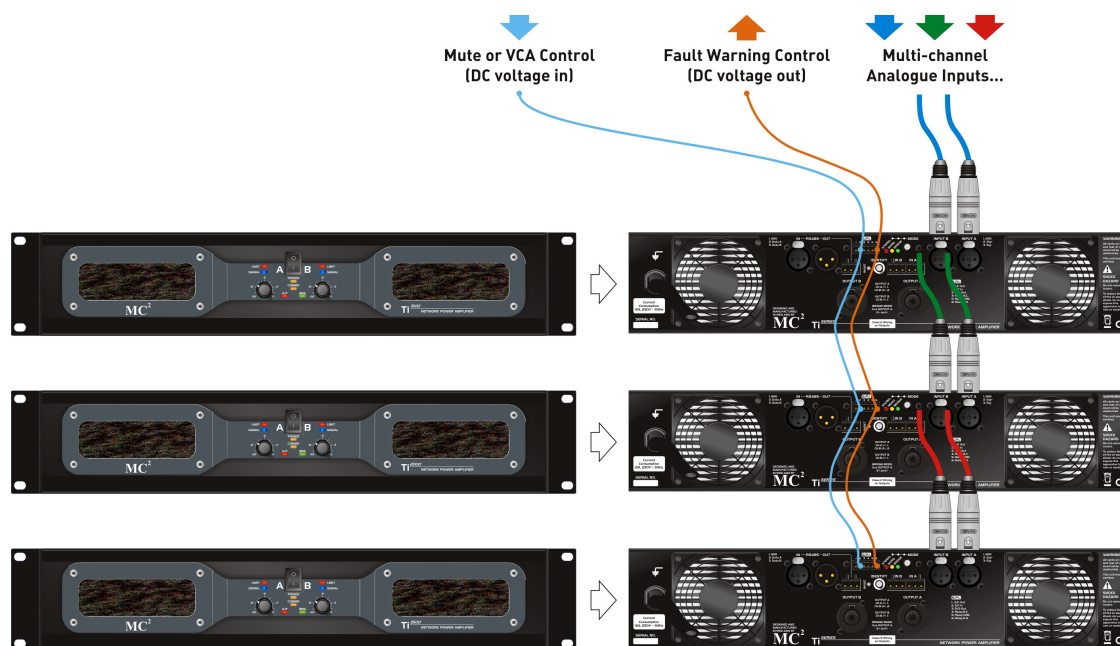## Introduction

Ti Series amplifiers and breakout boxes are designed to work in multiple configurations, offering various levels of remote control and monitoring, dependant on the application requirements. These start with simple closed contact control of amplifiers and work all the way up to a fully managed system with a computer connected. Examples of the configurations are outlined in this application note. For full details of how the configure the amplifiers and breakout boxes using iCore, please refer to the operator manuals for these products.

Unmanaged Amplifier Applications

Even when not connected to any remote control interfaces, the amplifiers can be set up to monitor their loads (and other operating conditions) and report any issues via a simple logic output (and/or via an isolated relay output).

The system only has to be connected to ICORE once, to discover all devices, then the computer can be disconnected and the unmanaged system is ready. The GPIO port input can also be configured to behave in a variety of ways, including muting the amplifier(s), shutting them down, or VCA mode, using the built-in digital pots. The front panel controls may be disabled to prevent unwanted adjustments.* This can be set-up on an amp-by-amp basis so different parts of the system can respond differently if required.


Mute or VCA Control (DC voltage in) Fault Warning Control (DC voltage out) Multi-channel Analogue Inputs...

*Controls disabled via internal links. Software can report if pots are disabled.

www.mc2-audio.co.uk
Tel. +44 (0)1404 44633 Fax. +44(0)1404 44660
MC² AUDIO Ltd. |Units 6-8 Kingsgate | Heathpark Industrial Estate
Honiton | Devon | England | EX14 1YG

Page 1

Basic Breakout Applications

For use with any make of amplifier or mixing desk, the breakout box will provide 8 or 16 channels of audio from the chosen digital audio network. The unit will function with no additional set-up required straight from the box (once the network card has been configured) *

If level control is required of individual outputs, then connecting the box to a PC running ICORE will open up the possibility to adjust gains, mute outputs and name all channels and the box itself, when managing multiple devices.

The breakout box remembers all of this, so it can be connected to any computer running the software.
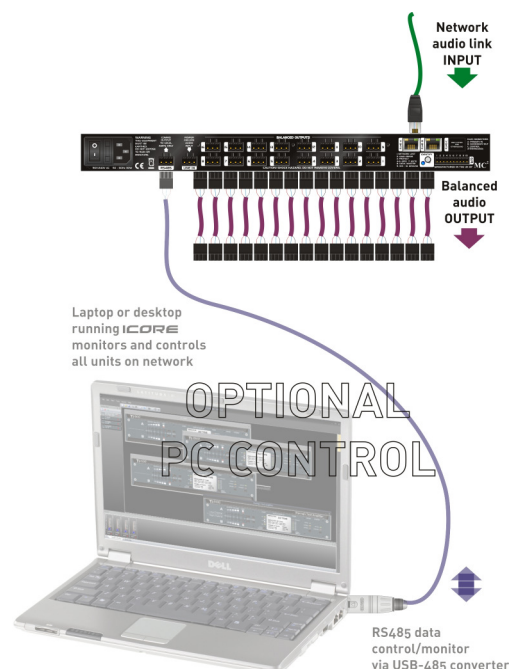
Managed Applications – Breakout Box Master

Connecting to a *Ti* Breakout box opens up a complete monitored system, with any breakout box anywhere on the network being assignable as a master. The system only has to be connected to ICORE once, to discover all devices, then the computer can be disconnected and the off-line monitoring enabled. Up to 128 devices can be connected.

The selected master Breakout will then monitor and report on any selected (programmable) errors using the RS485 to communicate with the entire system, via the network bridging facility.   The GPIO port on the master Breakout is used to report any problems and to allow for both local and system wide muting and standby control of the system.

MC² AUDIO
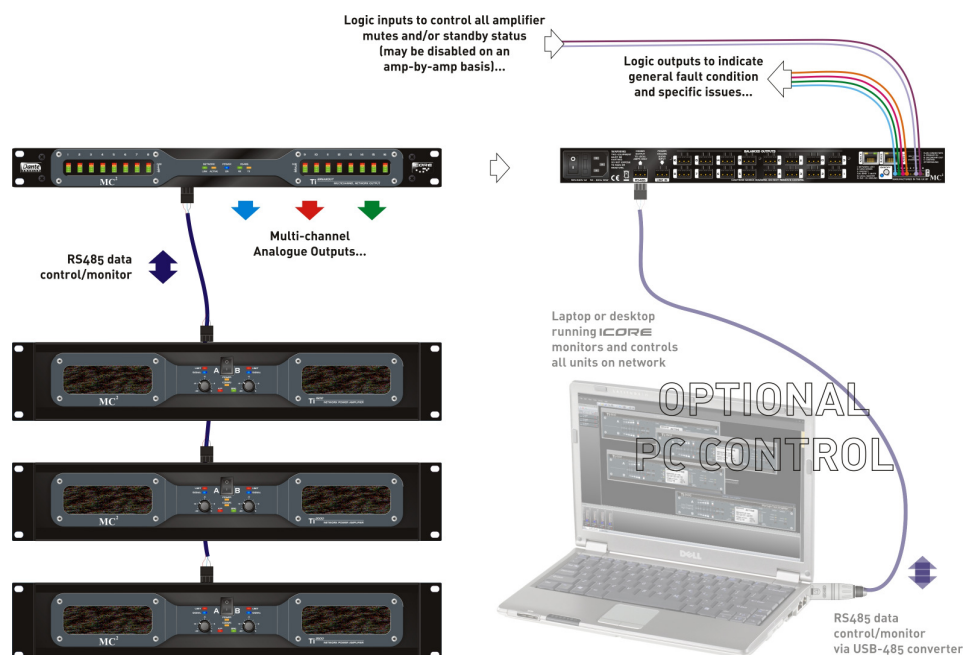
Managed Applications – PC Master Control

All that's required for a completely managed remote system is a PC with an RS485 adapter and a copy of ICORE. All amplifiers (and Breakout boxes) can be monitored with readouts of loads, output voltages and currents, and temperature always available.

Additionally, all units can be named and all individual outputs can be named. Amplifier channels' gains can be adjusted, and any output "soloed", system-wide. All the GPIO configuration of the system is performed via ICORE, along with the setting up of load monitoring parameters and adjustment of amp mode, power on delay and other features.

System firmware is kept up to date with the integrated loader which may be used through the network.*
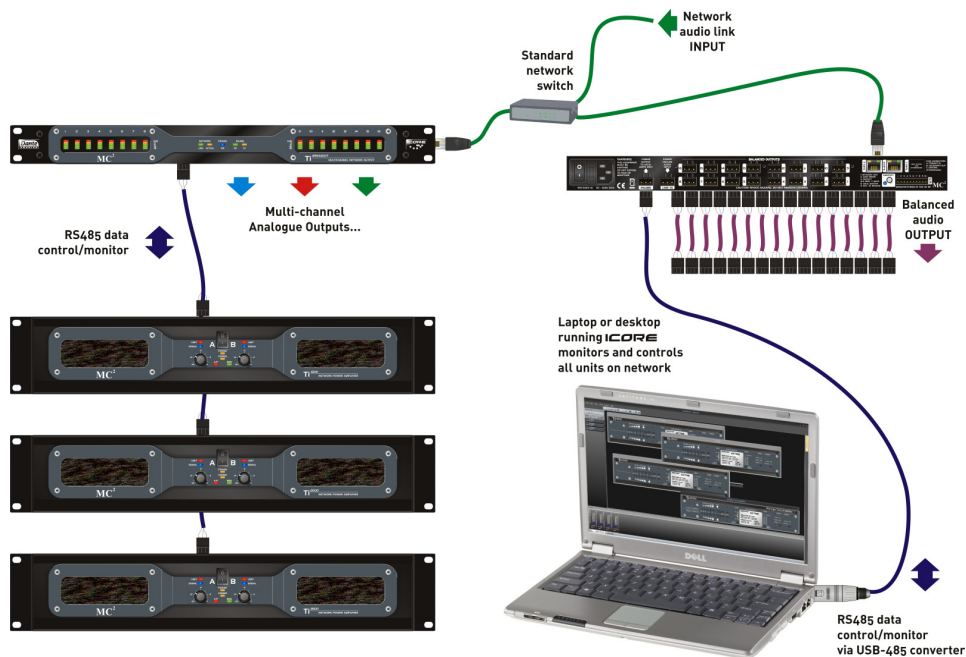
*Firmware updates via direct RS485 network connection only – not via digital audio network bridging.

www.mc2-audio.co.uk
Tel. +44 (0)1404 44633 Fax. +44(0)1404 44660
MC² AUDIO Ltd. |Units 6-8 Kingsgate | Heathpark Industrial Estate
Honiton | Devon | England | EX14 1YG

Page 3