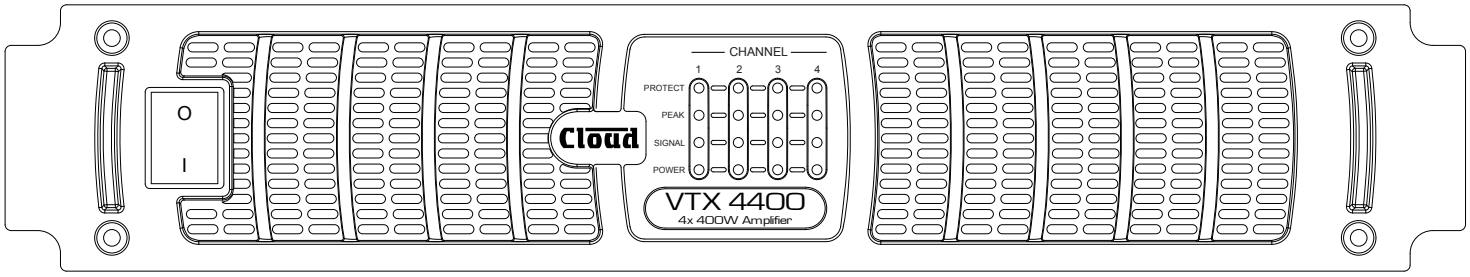
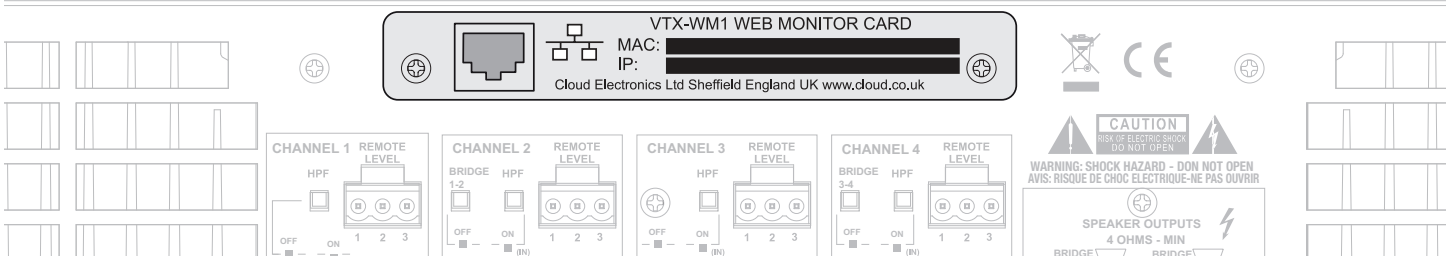
CLOUD VTX-WM1 WEB MONITOR CARD

Clearly better sound

SURVEILLANCE OPTION FOR VTX SERIES AMPLIFIERS



VTX Power Amplifier



Back panel detail showing position of card slot

General Description

The VTX-WM1 Web Monitor Card is a retrofittable option for Cloud's new VTX power amplifiers. It allows the amplifier's performance and settings to be monitored at a remote location using any computer (or PDA, smartphone, etc.), via a standard Internet browser. No dedicated software application or PC hardware is necessary. The card plugs into a reserved slot on the amplifier's rear panel, and is fitted with an RJ45 Ethernet interface using regular network protocols. The data rate used is very low, which allows the building's existing IT infrastructure to be used instead of a dedicated network. Amplifiers are simply connected into the IT system at the nearest convenient point. Where multiple amplifiers are co-located (e.g., in a rack), an Ethernet switch, with the appropriate number of ports, may be used to facilitate connection.

The web browser GUI is simple and intuitive, and the data clearly presented. A set of tabbed pages is displayed, which report the details and performance of all the amplifiers on the network. Parameters monitored include: network connection status, the settings of all amplifier rear panel switches and gain controls, protection circuitry activity, internal temperature, power status and input signal level for each channel. Fan operation and RL-1 remote volume control setting (if fitted) are also confirmed.

A load impedance test is available to check the integrity of each channel's loudspeaker(s) and cabling. This test may be run either manually (i.e., initiated from the GUI as required), or automatically at pre-determined times and intervals – usually during periods of non-occupancy. The frequency used for the impedance test is also programmable.

A password protected 'Housekeeping' page is provided which allows site-wide details of the installation to be entered. This page also allows the load impedance test parameters, IP addresses and other system settings to be configured.

A real-time clock runs independently of the amplifier power supply, and an event log is maintained, which can be inspected as required for investigative purposes in the event of system problems. The system can also be configured to generate an email report if the WM1 detects a fault condition. The report may be formatted as SMS text if required. (This assumes that the necessary Internet connection and email/mobile accounts are available.)

- Optional Ethernet interface for Cloud VTX power amplifiers, allows remote monitoring of amplifier status from any computer, anywhere
- Operates with standard web browsers – no dedicated software necessary
- Uses standard network protocols
- Low data rates mean that existing IT infrastructure can be used – no dedicated network necessary
- Simple and intuitive user interface
- Easy to set up
- Monitors internal temperature, signal level, protection circuitry and fans
- Confirms all amplifier rear panel control settings
- Checks load impedance on demand, or at scheduled times, using user-defined frequency
- Real-time clock for event logging and test scheduling
- Automatic email or SMS text alert on pre-defined fault condition

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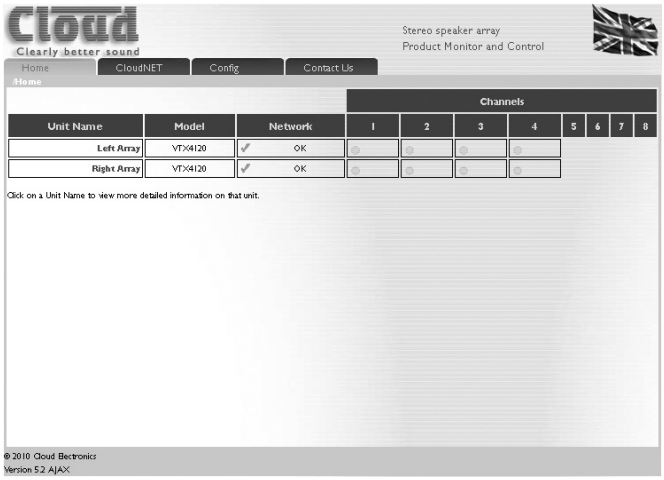
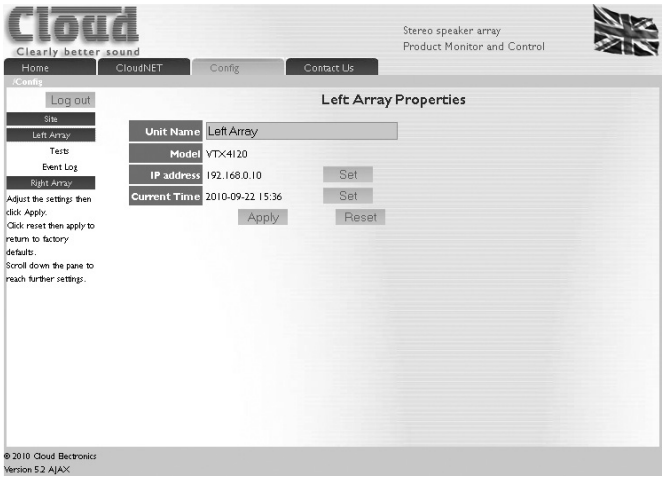
GUI pages

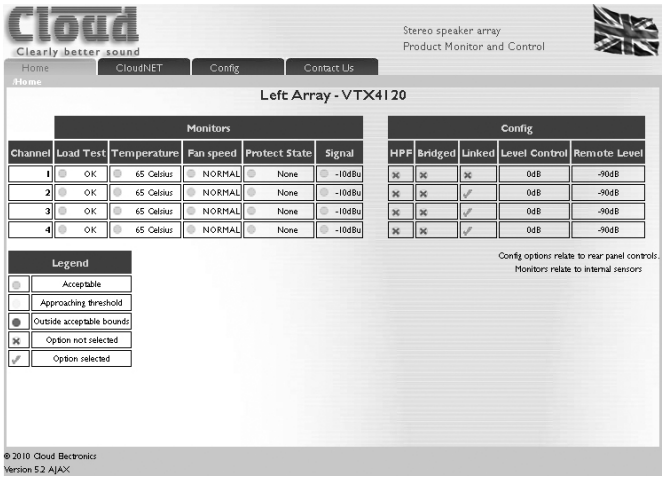


Home Page

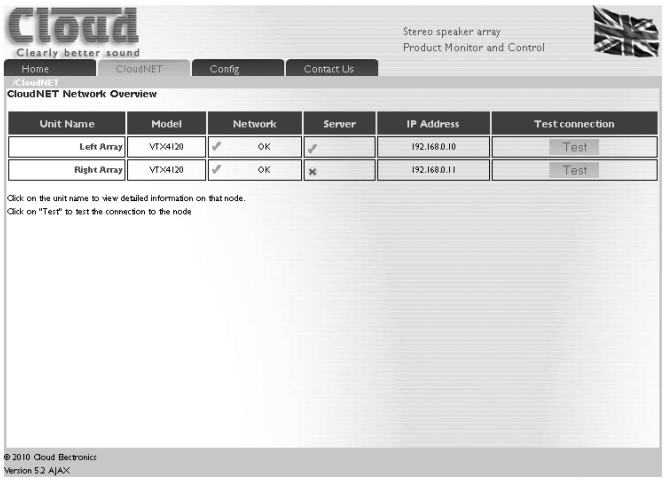
Site Configuration



Properties



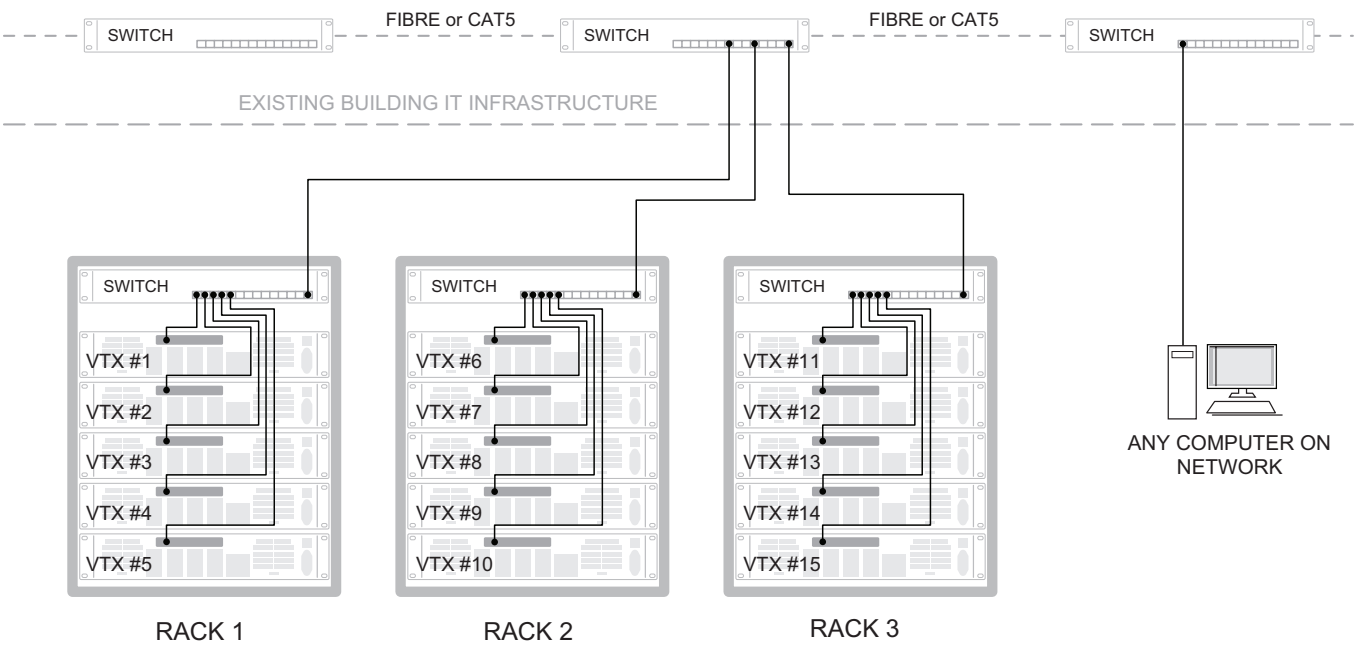
Details



CloudNET network overview

System Example

The diagram shows three racks of VTX amplifiers, with five amplifiers per rack. A standard Ethernet switch is installed in each rack, to which the VTX-WM1 card in each amplifier is connected, one amplifier per port. The switches, in turn, are connected into the building's IT infrastructure. Amplifier status may be viewed from any computer, anywhere in the network, as long as the operator has the necessary login privileges.



Technical Specifications

Tone Generator

Level	40 dB below max amp output	Injected post level controls, other channels muted.
Frequency range	60 Hz to 20 kHz in 1/3-octave steps	

Signal detector

Sensitivity	-30 dBu to +10 dBu	20 Hz to 20 kHz

Networking

DHCP	Not supported
Data rates	100 Base T
Connector	RJ45