



## 5200CU/2 *Clipsal HomeMinder Controller*

**T**he 5200CU/2 is an intelligent controller for the management of buildings to improve energy efficiency, convenience, security and lighting control.

Clipsal HomeMinder is aimed at applications where specific reactions are required to particular events.

Clipsal HomeMinder has the ability to schedule and run programs when certain events are true. Clipsal HomeMinder can also monitor and control the systems in a building, enabling the home owner to remotely access the building's electrical systems from a personal computer.

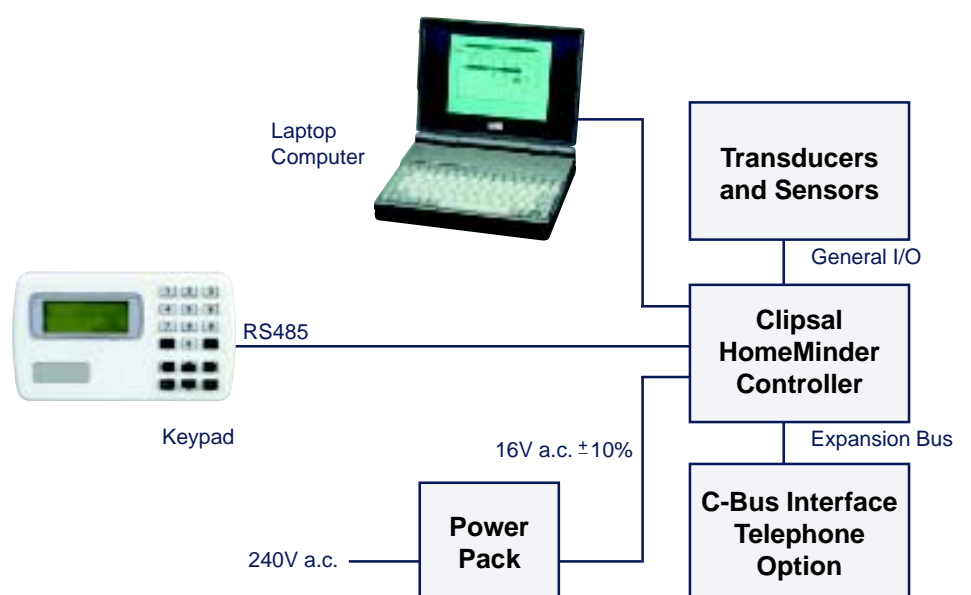
Clipsal HomeMinder is specifically designed for Home Automation Applications.

The Clipsal HomeMinder Controller's function can be extended with the addition of expansion cards, such as the telephone support option. An expansion connector on the Clipsal HomeMinder Controller provides the electrical and mechanical interface to these options.

## Features

The Clipsal HomeMinder Controller supports common sensors and devices including, but not limited to:

- Passive infrared motion detectors
- Reed switches for doors and windows
- Pressure mats
- Glass break detectors
- Panic push buttons
- Temperature sensors
- Watering system moisture probes
- Keypads
- Strobes
- Sirens and screamers





## Clipsal HomeMinder Software

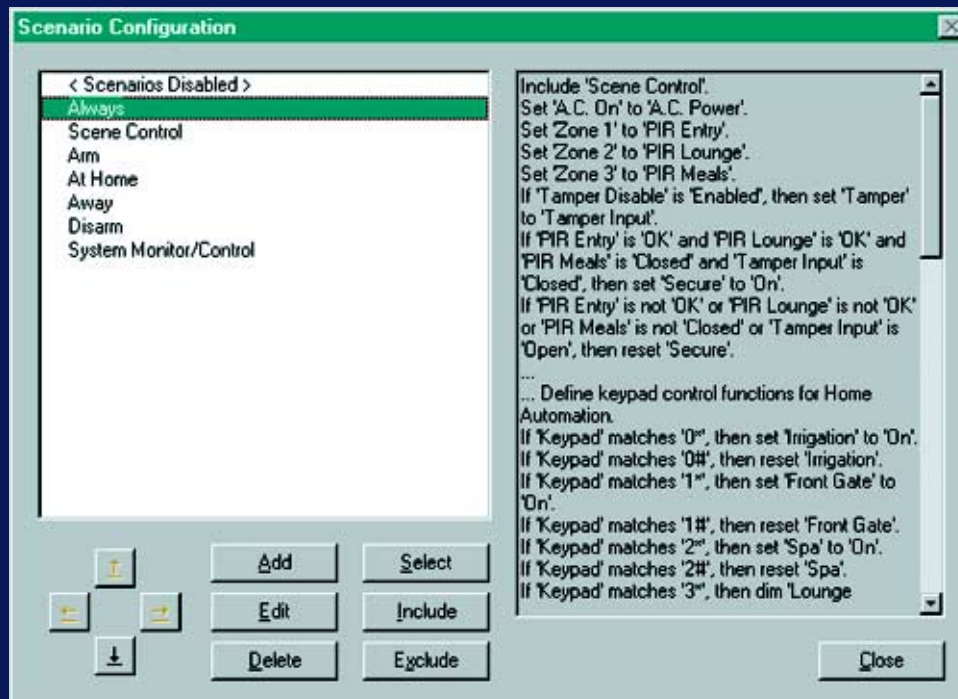
The Clipsal HomeMinder software is a Windows based application, which uses drop down menus and selection via mouse and keyboard commands. The software operates on an IBM compatible personal computer running Windows 3.1 or later versions. Your PC will require a spare COM port to allow connection to the Clipsal HomeMinder Controller.

Clipsal HomeMinder supports a graphics background on the main Clipsal HomeMinder screen, which represents a building, factory or home layout for ease of programming. It also provides a pictorial background for monitoring the electrical systems. The graphics backdrop can be a scanned image, or can be created from any bit mapped drawing program such as Windows Paint Brush, Harvard Graphics or Corel Draw.

Devices and sensors are represented on the backdrop as icons. Clipsal HomeMinder supports a set of standard icons for common sensors and devices, and allows the user to create customised icons. Icons are selected from the drop down menu and dragged to their positions on the display.

Associated with each device icon is the configuration data. Double clicking with the left button on your mouse will display all the data. Double clicking with the right button will toggle the state of the device.

A history log facility is provided to record alarms and specified events. The history log can be displayed or printed on demand. Alarms and events are stored in the stand alone Clipsal HomeMinder Controller whether the PC is connected or not. When the PC is connected, the history data accumulated in the Controller is transferred to the PC based history log.



## User Programming

A simple 'user friendly' programming language is provided to define sophisticated control, monitoring and alarm sequences. Definition of sequences or macros is by simple to follow menus or by the standard Windows form of keyboard editing including, copy, cut and paste. Each macro can action an output or program change dependent on one to four input condition tests, a time or date or time delay.

With battery backup and an on-board real time clock, you can be sure critical events will always occur at the correct time and on the correct date.

Up to 128 scenarios or programs can be defined for different routines important to you.

Scenarios may include 'At Home', 'Vacation', 'Away', and 'Every Weekend'. The Clipsal HomeMinder Controller supports 500 lines of program spread over all scenarios defined. Each scenario can have a maximum of 63 lines of code.

The device set-ups, alarms and scenarios use a common memory allocation. Although the Clipsal HomeMinder Controller supports 500 lines of code, the number of lines is reduced when, for instance, there are many device set-ups, or alarms are defined. An error message is displayed when device memory is low.

The Clipsal HomeMinder incorporates a number of industry compatible interfaces suitable for networking to other company systems, transducers, sensors and intelligent winning protocols.

## Interfaces

<b>Inputs*</b>	8 general purpose inputs compatible with industry standard voltage current output devices and security sensors.  8 digital inputs, compatible with voltage free switches.
<b>Outputs</b>	8 changeover relays, SPDT.

<b>C-Bus</b>	A direct connection to the industry standard C-Bus intelligent wiring systems. Uses unshielded twisted pair as its communication medium.
<b>X-10</b>	Power Line carrier interface, uses the mains power lines as its communication medium.
<b>RS232</b>	Serial interfaces for connection to a personal computer for programming and monitoring.
<b>RS485</b>	Serial interface for connection to the LCD keypads.
<b>Expansion Bus</b>	Located on the Controller Motherboard. The Expansion Bus provides the electrical and mechanical interface for the Telephone Interface and the Expansion I/O Module. A total of 3 expansion cards may be fitted.

\* Version 3.0.8 or higher software is required for this feature, when lower versions of software are used only 8 general inputs are available.

<b>Inputs</b>	<p>8 general purpose inputs, each general purpose input can be configured as:</p> <ul style="list-style-type: none"><li>- 0 - 1V analogue input</li><li>- 0 - 10V analogue input</li><li>- 0 - 30V analogue input</li><li>- 4 - 20 mA current loop input</li><li>- Temperature sensor input</li></ul> <p>8 digital inputs</p>
<b>Accuracy</b>	<p>The accuracy of the analogue inputs is better than 5%.</p>
<b>Outputs</b>	<p>8 SPDT (single pole double throw) relay contacts closures (max. load 1A at 24V d.c. or 60V a.c., resistive).</p>

<b>Variables</b>	<p>User defined internal flags, variables and counters.</p>
<b>PC Link</b>	<p>RS232 serial communications to the host PC via any spare Com port at 9600 bps. Cable length supplied is 4 metres with a DB9 socket. Cable can be RS232 length or asynchronous modems can be used. Can use direct connect or auto dial modems (Hayes compatible asynchronous operating at 2400 bps).</p>
<b>Keypads</b>	<p>Up to 4 serial keypads (Cat. No. 5208) or up to 5 LCD keypads (Cat. No. 5207 Series) can be connected to Clipsal HomeMinder. Different types of keypads cannot be connected to the same Clipsal HomeMinder Controller. The LCD keypad uses the RS485 serial port.</p>
<b>Power Supply</b>	<p>16V a.c. +/-10% from the in-line power pack provided. Power pack has a rated output of 3A.</p>

<b>Auxiliary Power</b>	12V d.c. at 500mA (battery backed) and 12V d.c. at 700mA (non battery backed) cards and keypads. (Ensure a power budget is calculated to ensure auxiliary supply can service devices.)
<b>Battery</b>	Circuit will charge an optional 6.5Ahr, 12V d.c. sealed lead acid battery for stand-by in case of mains power failure (or equivalent).
<b>Controller Case</b>	Wall mounted mild steel case with screw locked cover. Mountings for two tamper switches and battery. Bottom or rear cable entry points (for 20mm conduit) are provided.
<b>Dimensions</b>	300 x 200 x 100mm
<b>Weight</b>	3.5kg as shipped
<b>Operating Temperature</b>	0 - 45°C

## Technical Specifications

<b>Approvals</b>	EN 50082-1: 1992	EMC Generic Immunity Standards. Part 1. Residential, commercial and light industry.
	AS/NZ 3548: 1995 IEC/CISPR 22: 1993 EN55022: 1995 89/336/EEC	Conducted and Radiated Emission Tests
<b>Interfaces</b>	C-Bus	C-Bus SIM fitted as standard on all controllers. C-Bus SIM replaces PC Interfaces and incorporates Network Burden and System Clock.
	X-10	On-board. Available via RJ6 socket on motherboard.

Note: Clipsal Integrated Systems Pty Ltd reserves the right to change specifications or designs described in this brochure without notice and without obligation

This product range is part of the  Home Management Series



## CLIPSAL HOME MINDER - The World's Smartest Housekeeper

For further information contact your local Clipsal Office or an accredited Clipsal HomeMinder Installer

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