GLR2702

2-Channel 27MHz Gigalink™ Receiver

Features

- Wide supply connection – 11.0 to 28.0 Volts AC/DC
- Highly sensitive receiver input stage. When used with GLT27…. series transmitters and an ANT27L antenna, an operating range of 350 metres (980 ft) is possible.
- Two relay outputs. Both outputs can be operated simultaneously.
- Crystal controlled for high stability and performance.
- Dual Conversion to reduce interference.
- Uses micro-controller technology that can be re-programmed to suit unique applications.
- Momentary, latching and security latching output modes is user selectable.
- Power ON LED indicator.
- Test buttons for relay.

Applications

- Automatic gates, security, timer controlled outputs and simple on/off functions etc

Description

The GIGALINK™ is an advanced Remote Control technology available in the world today. GIGALINK™ is an invention that has revolutionised the entire Remote Control technology including Elsema's earlier version of FMT- … and FMR- … series.

The GLR2702 series state-of-the-art invention brings a new dimension in the world of Remote Control technology in domestic, commercial and industrial applications.

The innovative microcontroller technology replaces the traditional dip switch coding which eliminates any possible code grabbing. Special features such as over four billion code combinations, ability to program any number of transmitters to any of the receiver outputs, three user selectable modes, dual conversion superhet and operational over a wide voltage range all adds up to the most advanced and secure Remote Control available.

Four billion codes

The user can easily change the code on all the channels. Momentary joining the two CC pins on the receiver board sets all channels to one random code. One of 4,294,967,296 possibilities is selected.

Code Programming

For code programming, please refer to the separate programming instructions.

When programming is completed and the GIGALINK cable is removed from the multi channel receiver-coding socket, the 2-way dip switch is used to select different output modes. This is described below.

Output Modes
Relay output on the receiver can function in either momentary or latching mode. By default the mode is set to momentary. Modes selectable from the 2-way dipswitch. Dipswitch 1 corresponds to relay channel 1 and dipswitch 2 corresponds to relay channel 2.

Factory Default = Momentary

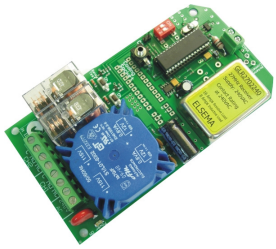
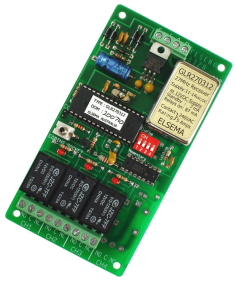
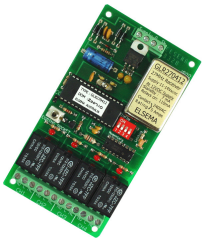
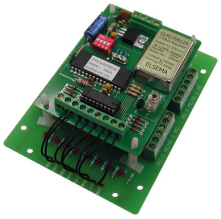
Momentary - Output is active for as long as the transmitter button is pressed.
This is a standard mode on most automatic gates or garage door openers.

Latching - Output remains active until next press of the transmitter button.
Similar to switching "on" and "off" a light.

Security Latching - Output remains active until power to the receiver is removed. Similar to security alarms and fire alarms. To activate the security latching mode, a link needs to be soldered into the hole marked as latching.

Customised Software
Custom output modes can be programmed to do special functions. Call Elsema for more details.

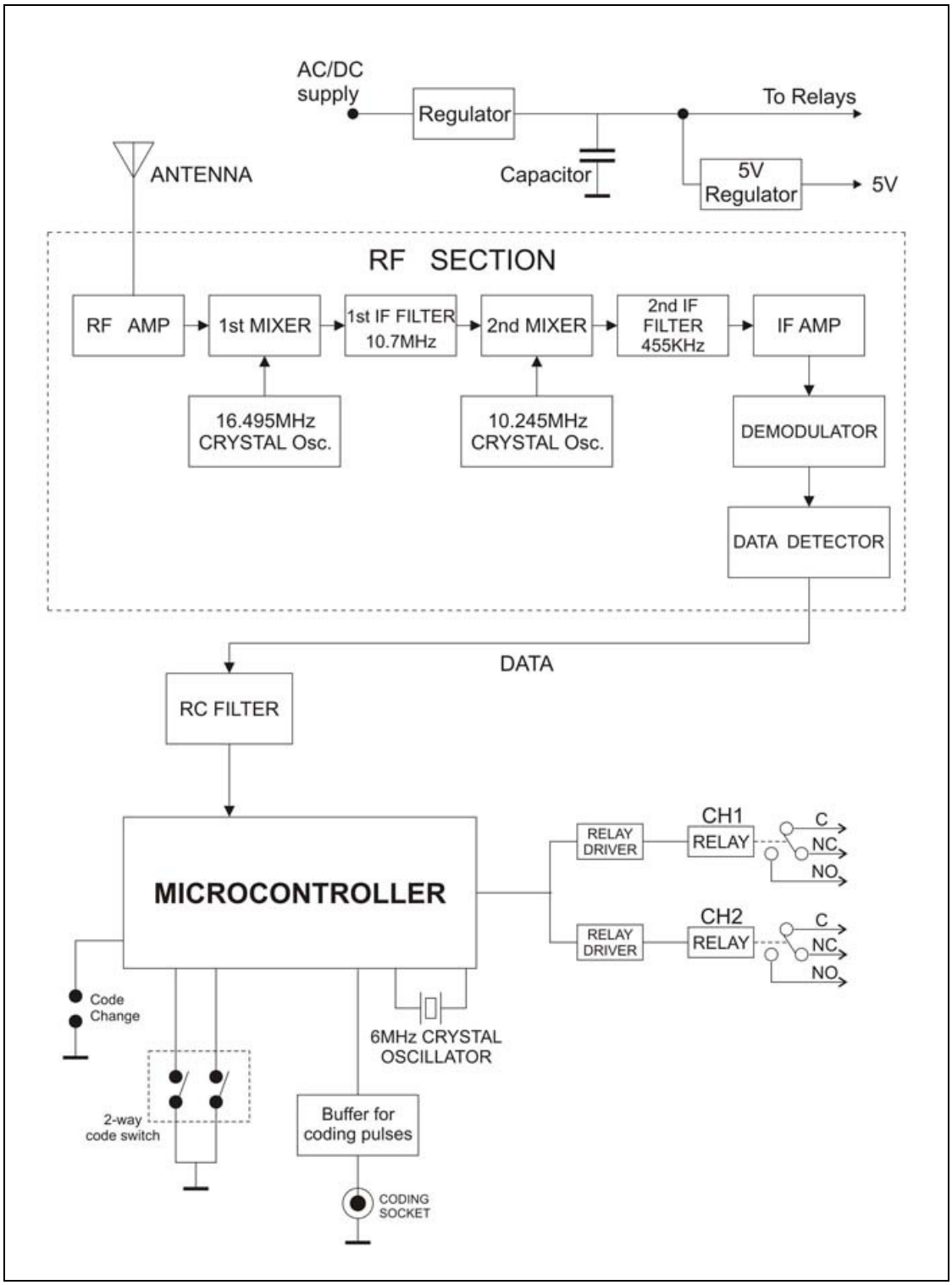
Products in the Range

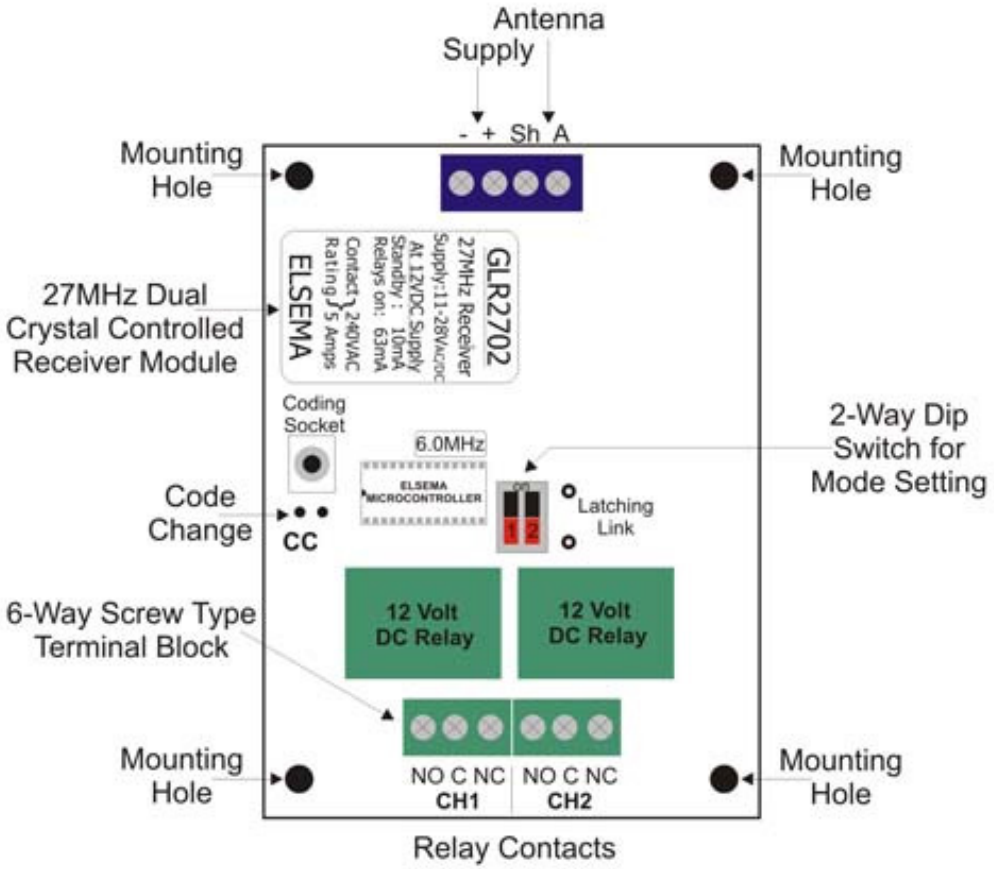
				
GLR2701 1-Channel	**GLR2701240** 1-Channel, 240V	**GLR2702** 2-Channel	**GLR2702240** 2-Channel, 240V	**GLR2703** 3-Channel Receiver
				
GLR2704 4-Channel Receiver	**GLR2708** 8-Channel	**GLR2708R** 8-Channel with Relay Output	**GLR2701SS** **GLR2702SS** 1,2 -Channel, Open Collector Output	**GLR2701SST** **GLR2702SST** 1,2 -Channel, Open Collector Output

Technical Data

Supply Voltage	11.0 to 28 VDC and 10.0 to 28 VAC. Can use Elsema AC power pack (PP12 or PP24). Supply lines should be less than 3 metres long to comply with radio frequency authorities.
Current Consumption	14mA standby at 12 VDC Supply 63mA if relay "ON" at 12 VDC Supply
Receiving Frequency	27.195MHz
Operating Temperature Range	-5 to 50°C
Sensitivity	1uV (for output to activate)
Decoding System	Microcontroller based 96-bit word
Code Combinations	4,294,967,296
Outputs	Two change over relay outputs, rated at 8 Amps/240 Volts
Connections	Supply, Antenna & Outputs: Screw type terminal block
Antenna	50 ohms, 27MHz CB-Antenna or approximately 1m long & 1mm thick piece of wire
Dimensions	96 x 70 x 20mm
Mounting Hole Size	3.97mm or 5/32"
Weight	83g
Microcontroller	Can be re-programmed to suit your customised needs
Useable Transmitters	All Elsema Type 27MHz GLT-... series
Useable Operating Range	Up to 350m with proper 50 ohms, 27MHz CB-Antenna. Up to 200m with 1m long antenna wire. Antenna wire should be extended and away from metal. Ranges assume line-of-sight operation.

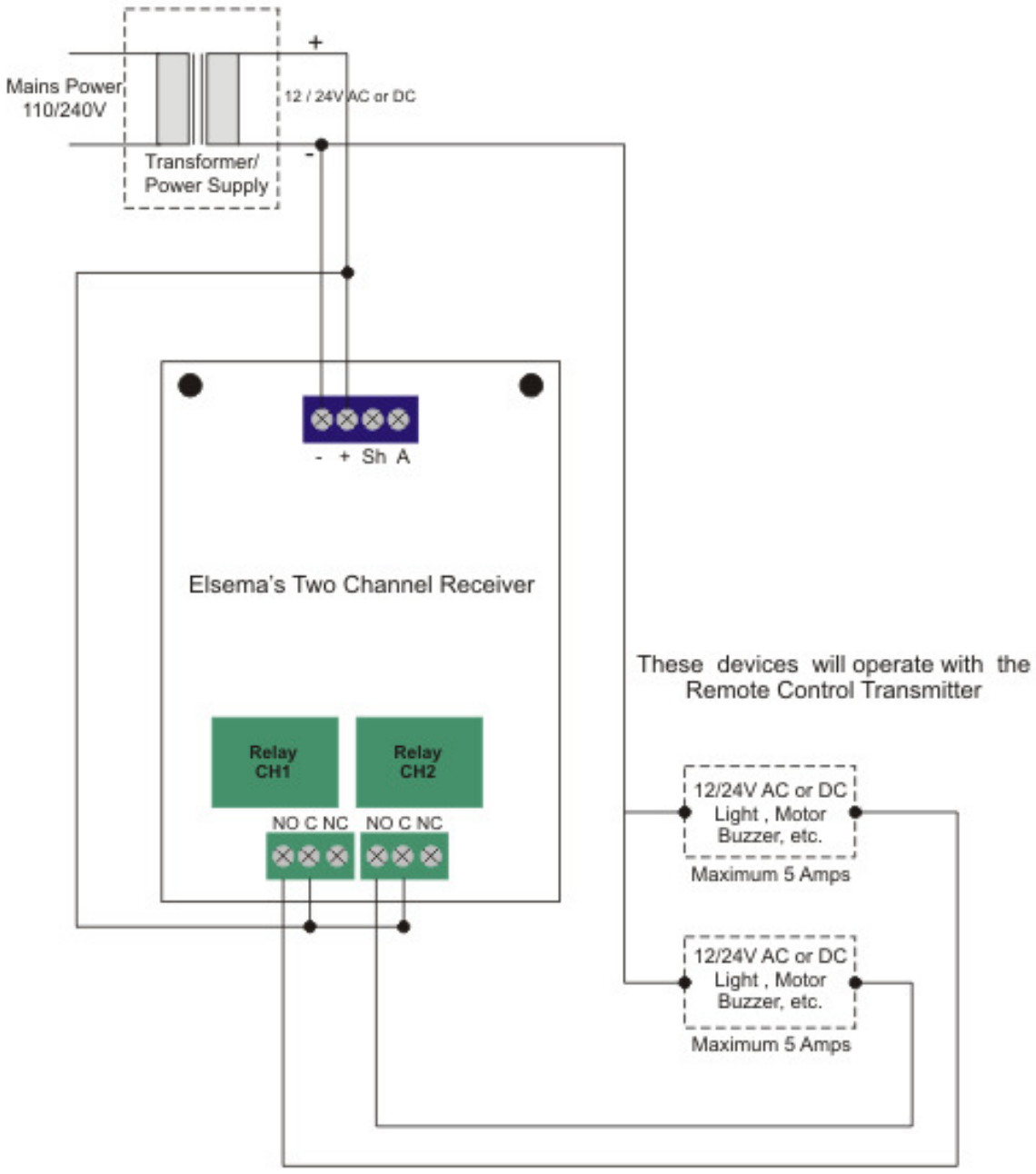
Block Diagram



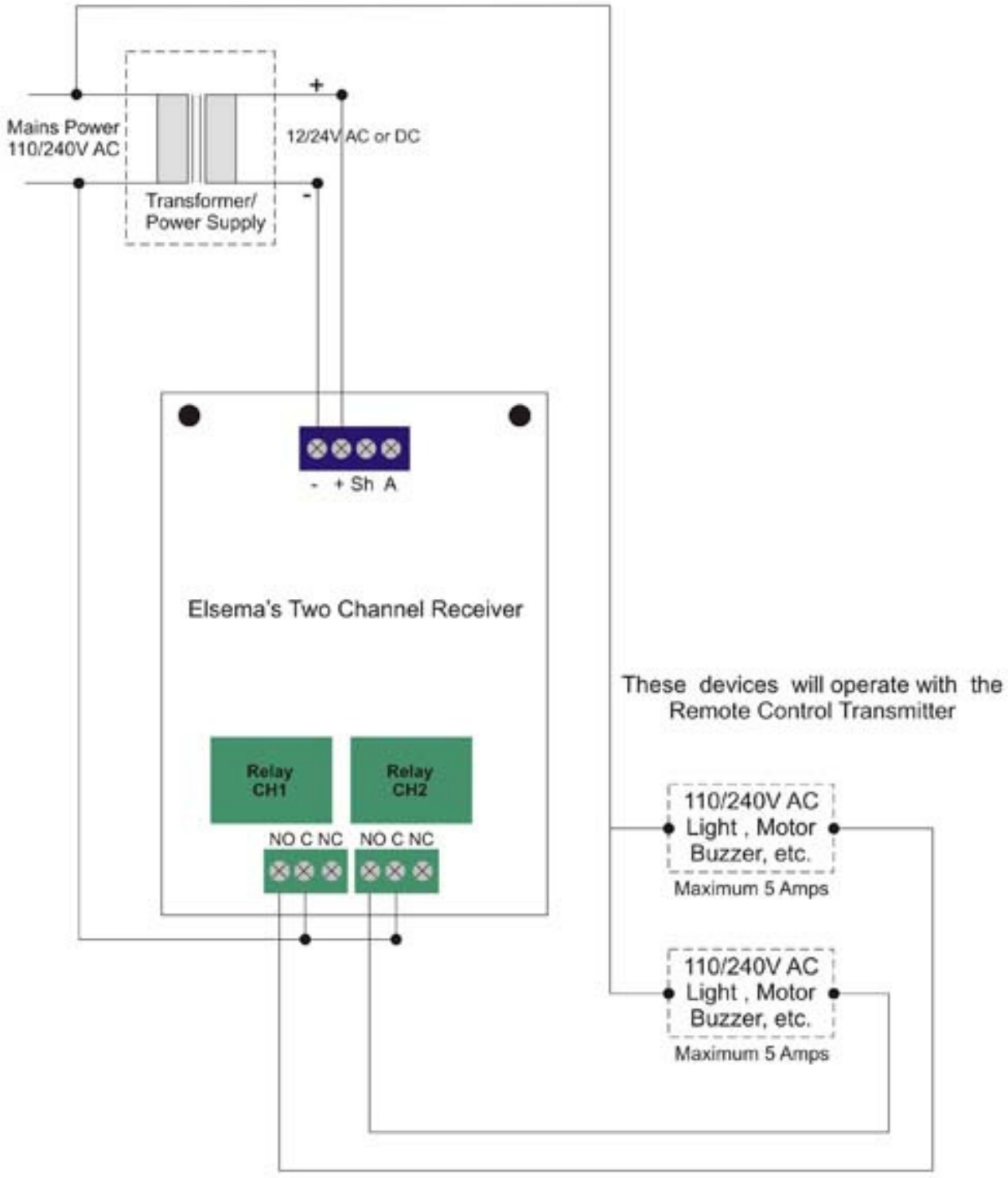


Sh terminal is used for antenna's using coaxial cables. The shield (braid) on the coaxial cable should be connected to the Sh terminal while the core of the coaxial cable is connected to the A terminal.

GLR2702 12/24 VDC Application



GLR2702 110/240 VAC Application



REGULATORY COMPLIANCE STATEMENTS

American Users

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference and
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Notice

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the computer and receiver.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Canadian Users

This Class [B] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe [B] respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Australian and New Zealand Users

This device has been tested and found to comply with the limits for a Class [B] digital device, pursuant to the Australian/New Zealand Electromagnetic compatibility (EMC) standard AS/NZS 61000.6.3 set out by the Spectrum Management Agency.