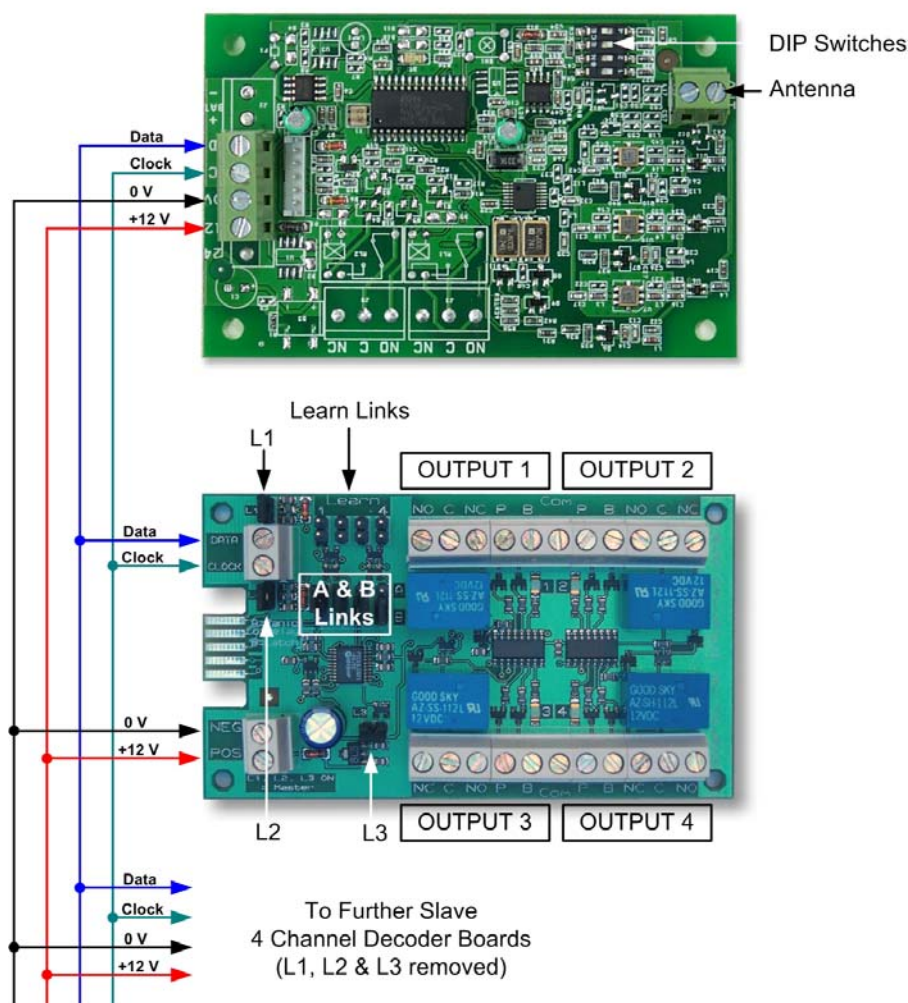


Multi-Channel Gateway Receiver & 4 Channel Decoder Boards



NEW Multi-Channel Gateway Receiver
 SW1 & SW2 = ON
 SW3 & SW4 = OFF
Part No. (100-GRX)

4 Channel Decoder Board
Part No. (100-DRX)

INSTALLATION MANUAL

1. INTRODUCTION

- The SmartLink **4 Channel Decoder Board (100-DRX)** is designed to be programmed with up to four different SmartLink Wireless Devices, providing Latched or Momentary **Relay Outputs** (NO/C/NC) as well as separate **Battery Low (B)** and **Panic (P) Outputs**.
- The **Multi-Channel Gateway Receiver (100-GRX)** board acts as a receiver for the 4 Channel Decoder Board (100-DRX).
- Multiple 4 Channel Decoder Boards (100-DRX) may be connected to one Gateway Receiver (100-GRX) allowing the system to be expanded in 4 channel blocks (up to 50 Decoder Boards therefore 200 individual Wireless Devices).

2. PROGRAMMING STEPS

Note: With every system, there must always be 1 x Multi-Channel Gateway Receiver (100-GRX) and 1 x 4 Channel Decoder Board (100-DRX) Master. The Master 4 Channel Decoder Board (100-DRX) is set by fitting links L1, L2 & L3. Any additional 4 Channel Decoder Board (100-DRX) added to the system must all be Slave Devices and have links L1, L2 & L3 removed.

1. On Power Up, all LEDs on the 4 Channel Decoder Board (100-DRX) should be Off indicating that there are no Codes stored. If any of the LEDs Flash on Power Up this indicates that there is a Code stored in that channel. (**Refer Section 3 for Erasing Codes**)
2. To program a Wireless Radio Device into the 4 Channel Decoder Board (100-DRX), **momentarily short out** the “**LEARN LINK**” (1, 2, 3 or 4) you wish it to be allocated to.
3. The LED on the 4 Channel Decoder Board (100-DRX) will Flash indicating it is in learn mode, do the following;
 - a) For a **Wristwatch Pendant** - press the “PANIC” Button once. The LED will stop flashing to indicate that the device is stored.
 - b) For a **3 Button Radio Key Pendant** - press the “ON” Button once to store the device.
 - c) For a **Smoke Detector** – Remove the battery, hold down the test button for 3 sec to discharge unit, connect battery, hold down the test button for 3 seconds to store the device.
 - d) For a **PIR** – trigger the PIR once to store the device.
 - e) For a **Reed Switch** – trigger the reed switch once to store the device.

NOTE: For older types of reed switches you will need to “Restore” an Alarm by moving the magnet towards the Reed Switch. Then “Trigger an Alarm” by moving the magnet away from the Reed Switch. Then finally “Restore” an Alarm by moving the magnet back.

Also Note that the new 56 bit Reed Switches will only work with the New Gateway receivers.

4. When a device is checked into the 4 Channel Decoder Board the Flashing will stop.
5. To program more Wireless Radio Devices, repeat steps 2 to 4.

NOTE: To store older devices, it might be necessary to activate the device 3 times.

3. TO ERASE A CODE

To erase any Wireless Radio Devices from memory, simply short out the appropriate “**LEARN LINK**” (1, 2, 3 or 4) continuously for 2 to 10 seconds until the LED turns Off.

4. “A & B LINKS” OPTIONS

Notes:

- The “A & B LINKS” on the 4 Channel Decoder Board 100-DRX are only checked at Power-Up. For any Link changes to be recognised you must Power-Down the Board.
- The “A & B LINKS” has no affect on the operation of the Panic (P) Output when the “PANIC” Button is pressed on a Radio Key Pendants.

NO LINK (Panic Output Only for “PANIC” button)

Application 1 – Wristwatch and 3 Button Radio Keys

1. Pressing the “PANIC” Button on a Wristwatch or a 3 Button Radio Key will latch the Panic Output (P) for 3 seconds.
2. Pressing the “ON” Button on a 3 Button Radio Key will latch the Relay Output (NO/C/NC) for 3 seconds.
3. Pressing the “OFF” Button on a 3 Button Radio Key will latch the Relay Output (NO/C/NC) for 3 seconds.

Application 2 – Wireless PIRs and Reed Switches

1. The Relay Output (NO/C/NC) will latch for 3 seconds every time a valid Code is received from any of the programmed Wireless PIR or Reed Switch when triggered.

A LINK ON (Panic & Relay Outputs for “PANIC” button)

Application 1 – Wristwatch and 3 Button Radio Keys

1. Pressing the “PANIC” Button on a Wristwatch or a 3 Button Radio Key will latch the Panic Output (P) **as well as the Relay Output (NO/C/NC) for 3 seconds.**
2. Pressing the “ON” Button on a 3 Button Radio Key will latch the Relay Output (NO/C/NC) for 3 seconds.
3. Pressing the “OFF” Button on a 3 Button Radio Key will latch the Relay Output (NO/C/NC) for 3 seconds.

Application 2 – Wireless PIRs and Reed Switches

1. The Relay Output (NO/C/NC) will latch for 3 seconds every time a valid Code is received from any of the programmed Wireless PIR or Reed Switch when triggered.

B LINK ON (Panic & Latch Relay Outputs)

Application 1 – Wristwatch and 3 Button Radio Keys

1. Pressing the “PANIC” Button on a Wristwatch or a 3 Button Radio Key will operate the Panic Output (P) for 3 seconds.
2. Pressing the “ON” Button on a 3 Button Radio Key will permanently latch On the Relay Output (NO/C/NC). Further presses of the “ON” Button when the Relay is On will have no affect.
3. Pressing the “OFF” Button on a 3 Button Radio Key will latch Off the Relay Output (NO/C/NC). Further presses of the “OFF” Button when the Relay is Off will have no affect.

Application 2 – Wireless PIRs and Reed Switches

1. The Relay Output (NO/C/NC) will latch On when a valid Code is received from any of the programmed Wireless PIR or Reed Switch when they Alarm. And will latch Off by either pressing the “OFF” Button on a “paired” 3 Button Radio Key or by a Restore Alarm on any of the Reed Switches.

5. OUTPUTS

RELAY OUTPUT (NO/C/NC)

The Relay Output is a single pole changeover Dry Contact rated at 1 amp @ 28 Volts. The Relay Output is used to provide either Alarm Output or Arm/Disarm Output.

PANIC OUTPUT (P)

The Panic Output is a Transistor Open Collector (Switch Low) Output rated at 100mA. The Panic Output will latch for 3 seconds every time that either;

- a) A "PANIC" Button is pressed on a 3 Button Radio Key or a Wristwatch Button is activated or,
- b) A Tamper Alarm is generated on a Radio PIR or a Reed Switch.

Note – The "A & B LINKS" has no affect on the operation of the Panic Output.

LOW BATTERY (B)

The Low Battery Output is a Transistor Open Collector (Switch Low) Output rated at 100mA. The Low Battery Output will latch for 3 seconds every time that it receives a Low Battery signal from either a Radio Key Pendant or an Alarm Device and should only be used as a warning that batteries require changing.

6. NORMAL OPERATION

The SmartLink Receiver and Decoder Board requires a DC regulated supply from 12 Volts to operate correctly. When operating normally, the LED will turn On for 2 seconds whenever a valid Radio transmission is received. Always ensure that the SmartLink Receiver and Decoder Board is kept well away from potential interference devices i.e. Televisions, Videos or Computers. If you are experiencing problems move the SmartLink Receiver and Decoder Board well away from other devices then connect with a battery only and re-test to attempt to isolate the cause of the problem. Always keep the antenna well away from your Control Panel, wiring and potential Radio Interference devices. The antenna should be kept straight and not coiled up tightly or tied into a knot. **NEVER SHORTEN OR LENGHTEN THE ANTENNA AS IT IS CRITICALLY TUNED LENGTH.**

7. SPECIFICATIONS

▪ Size	100 x 60 x 20 mm	▪ Operating Voltage	12 Volts
▪ Weight	40 gms and 60 gms	▪ Quiescent Current	15 Ma
▪ Type	Superhetrodyne	▪ Low Battery Output	100mA @ 12V
▪ Frequency	303.875 MHz	▪ Panic Output	100mA @ 12V
▪ Bandwidth (3db)	800 Khz	▪ Relay Output	Dry Contact rated
▪ Sensitivity	> -100 dbm		1A @ 28V
▪ No. of Radio Devices	4 (per Decoder Board)		

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