

P/N: RE927X



Installation & Operation Manual. Rev: 1.0

The Smartlink Interactive Gateway Module (IGM) connects to a Honeywell Vista™; DSC® PowerSeries™; GE® Interlogix Simon XT, XTi®, Caddx NX®, Concord®, Napco™ Gemini™ P816; Paradox™ MG 5050 and Texecom 412/816/832 panels and provides full smartphone app control of the panel plus home automation features using its inbuilt Z-Wave radio module. The IGM connects to the Smartlink Cloud via its inbuilt 3G modem and SIM card.

The Smartlink IGM is wired to the alarm panel's keypad bus and incorporates a selection switch allowing the technician to field configure the device based on the type of system it is installed on.



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INTRODUCTION

Smartlink IGM Features

- Simple installation.
- 3G SIM polled communications path.
- Secure 128Bit AES Encrypted data transmission.
- Remote Firmware upgrade capability.
- Contact-ID format.
- Compact and versatile form factor.
- 12V DC Supply Voltage.

Compatible Panels

- Paradox Magellan MG5050
- Honeywell Vista® 15P and 20P
- DSC PowerSeries
- Caddx NX
- UTC Concord 4
- GE Interlogix Simon XT & XTi
- Napco Gemini P816
- Texecom 412, 816, 832

Parts List

RE927X Parts	Optional Accessories (Purchased separately)
Smartlink IGM	Smartlink IGM-Paradox Interface Cable. P/N: 995528
Inbuilt Antenna	
Pre-installed 3G SIM	
Installation manual (This document)	

Specifications

Current Draw:	220 mA Nominal. 2A peak
Housing Dimensions:	101mm x 152mm x 26mm

Temperature Range:	-18°C to 50°C
Cellular:	3G GSM

INSTALLATION & WIRING INSTRUCTIONS

General

- DO NOT MOUNT INSIDE A METAL ENCLOSURE – There are internal antennas that need to be in free-air to communicate.
- The communicator should be mounted in a location that will optimize cellular signal strength. Signal strength is indicated by a row of LEDs on the circuit board. *See table and 'IGM Layout' on the following page.*
- **Before** connecting the IGM to the panel some programming must be done. Refer to the specific panel programming section for more information.
- **Before** connecting the module you must add a contact that uses the panel MASTER CODE to the account. This will ensure the module can properly communicate with and configure the required system settings.

Maximum cable lengths are shown in the table below. These figures assume the communicator is the only device attached to the cable. If multiple devices share the same cable, the maximum cable length must be de-rated accordingly.

Refer to the Alarm Panel manufacturer's installation manual for details of cable type and cable length de-rating information.

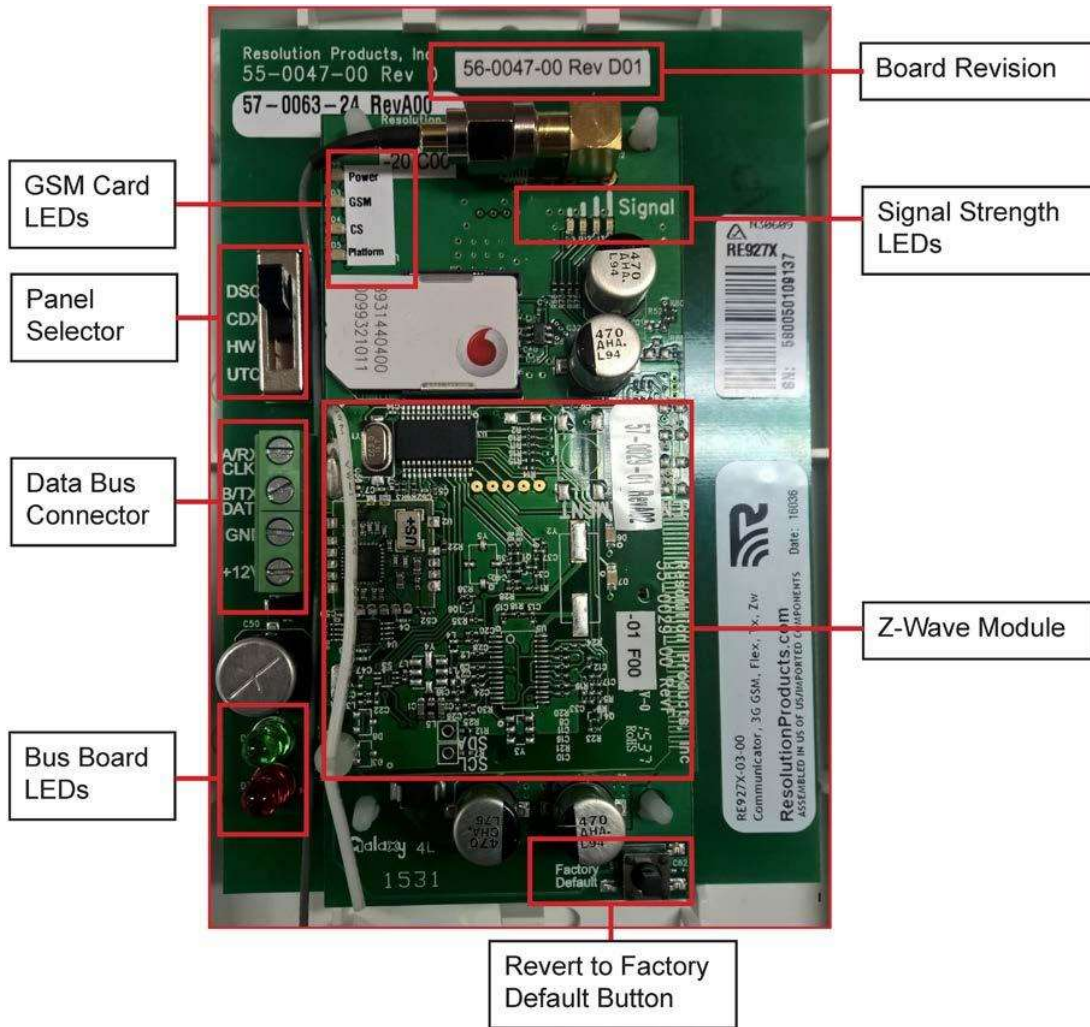
Wire Size (AWG)	Maximum cable length to panel (m)
18	105
22	38
24	22

LED Indicators

Bus Board LEDs	Indication
Green	ON: Board is powered and running
Red	Flickering: Module is communicating with panel

GSM Card LEDs	Indication
Power (Green)	ON and Flashing once per second: Board is powered and running in Primary Mode. ON and Flashing every three seconds: Board is powered and running in Backup Mode.
GSM (Red)	ON: Unit is registered with the local GSM network.
CS (Red)	ON: Connection to the central station established. Flashing: Problem detecting Panel type.
Platform (Amber)	ON: Connection to the Panel and connection to the interactive server is established. Flashing: Problem communicating with the panel.

IGM Layout



GSM Signal Strength LEDs

A minimum signal of 2 LEDs is recommended.

LEDs	GSM Signal Strength
0	0-6 – Poor
1	7-9 – Marginal
2	10-12 – Good
3	13-17 – Better
4	17 + – Best

Paradox Programming and Connections

Compatible Paradox Panels.

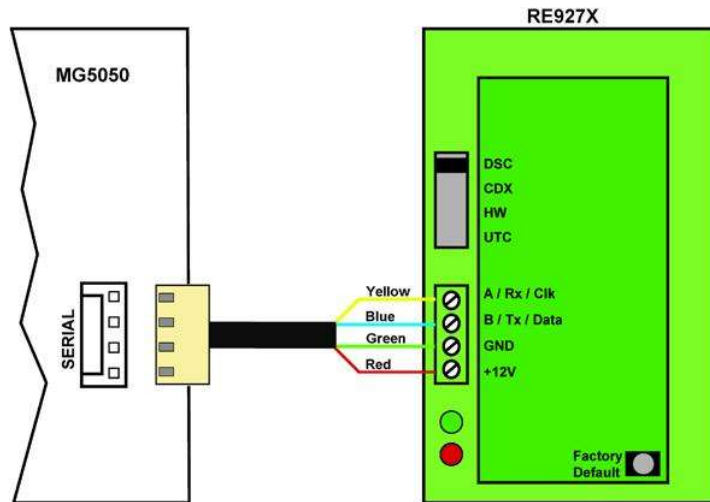
- MG5050

Account Setup

- 1) Refer to IGM account setup instructions on page 2 and set up the account on the Dealer Portal.

Panel Programming

- 2) Using the Systems Installer code set:
 - a) Panel Identifier [910] : 1234
 - b) PC Password [911] : 1234



IGM Connection

- 3) Disarm the system (all partitions).
- 4) Power down the Paradox system.
- 5) Set the RE927X panel selector switch to DSC.
- 6) Connect the Paradox panel and the RE927X using a Smartlink IGM-Paradox cable (P/N: 995528) as shown in the Wiring Instructions above.
- 7) Apply power to the Paradox system.
- 8) Wait for the Platform LED on the RE927X to become solid, this can take up to 2 minutes.
- 9) Installation complete.

NOTE: Once an IGM is connected you will no longer be able to enter Programming Mode. To access Programming Mode disconnect the IGM from the paradox and power cycle the paradox. To reattach the IGM you will need to factory default the IGM and follow the IGM connection steps.

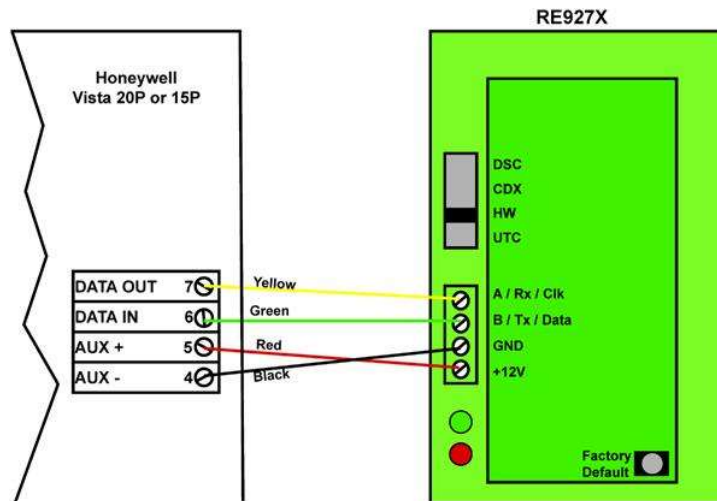
Vista 20P and Vista 15P Programming and Connections

Compatible Honeywell Panels:

Vista 20P (version 4.0 or later)
(controls partition 1 only)
Vista 15P (version 4.0 or later)

Account Setup

- 1) Refer to IGM account setup instructions on page 2 and set up the account on the Dealer Portal.
- 2) **Be sure to add a contact that uses the system MASTER CODE to the account before connecting the module. This will ensure the module can properly communicate with and configure required system settings.**



Panel Programming

- 3) Disarm the system (all partitions).
- 4) The RE927X automatically communicates with the Vista using AUI device 2.
- 5) Enable AUI 2 in the *189 field. If a device is already using AUI 2, that device must be moved to another AUI address (AUI 1, for Vista 15P, AUI 1, 3 or 4 for Vista 20P)
- 6) If Vista system has a *91 field that supports RIS, then RIS will need to be disabled. Refer to panel programming instructions for details. If RIS is not supported no action is required.
- 7) Vista 15p and 20p panel versions 10.21 and later have the keypad lockout feature enabled by default. It is recommended that this feature be disabled to prevent possible keypad lockout conditions if the system master code in the IGM is not synchronized with the master code in the Vista panel. Use programming option *188 to disable keypad lockout.

NOTE: If it is required to have the keypad lockout feature enabled, it is critical that the system master code be set up as a contact for this account before connecting the module to the panel (see Step 2 above). Also all changes to the system master code must be done at the user portal or dealer portal, not at the keypad. Failing to do this may result in a keypad lockout condition.

IGM Connection

- 1) Disarm the system (all partitions).
- 2) Power down the Vista system.
- 3) Set RE927X panel selector switch to HW
- 4) Connect the Vista and RE927X as shown in the Wiring Instructions above.
- 5) Apply power to the Vista 15P/20P system. The control panel will be busy for 50-60 secs after power up.
- 6) The module will enable the following settings automatically:
 - a. IP/GSM device (*29) = 1 (enabled)
 - b. Communicate to IP/GSM device first (*55) = 1
 - c. (IP/GSM first) Opening Report (*65) = 1 (enabled)
 - d. Closing reports (*66) = 1, (stay closing & away closing reports enabled)
 - e. Alarm cancel report (*68) = 1 (enabled)
 - f. AC Power restoral report (*73) = 1 (enabled)
 - g. Low Battery restoral report (*74) = 1 (enabled)
 - h. Phone Monitor (*92) = 0 (disabled)
- 7) Once complete, the keypad(s) should display "DISARMED Ready to Arm".
- 8) Installation is complete.

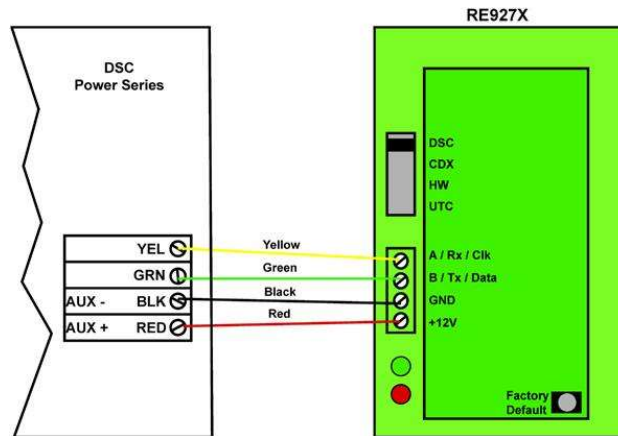
DSC Power Series Programming and Connections

Compatible DSC Panels:

PC580 (Power 432)	PC5010 (Power 832)	PC1616
PC1555 (Power 632)	PC5015 (Power 832)	PC1832
PC1555MX (Power 632)	PC5020 (Power 864)	PC1864

Account Setup

- 1) Refer to IGM account setup instructions on page 2 and set up the account on the Dealer Portal.
- 2) **Be sure to add a contact that uses the system MASTER CODE to the account before connecting the module. This will ensure the module can properly communicate with and configure required system settings.**



Panel Programming

- 3) Using the system's Installer Code:
 - a) Disable the communicator ([380]:[1])
 - b) Disable the Telephone Line Monitor ([015]:[7])
 - c) Delete Telephone Numbers (programming section 301-303)
 - d) Verify Alt Comm ([351]:[5]) is enabled
 - e) Verify T-Link is Disabled ([382]:[5])
 - f) Verify Master Code Not Changeable is Disabled ([015]:[6])
 - g) Verify Access Code Required for *1, *2, *3 menus is disabled ([022]:[1])
 - h) Verify that keypad lockout is either zero(disabled) or higher than 6 ([012])
 - i) If you have removed any bus devices, perform a Module Supervision Reset ([902])
- 4) Verify Alarm report codes are setup properly for the zones that are being used, 1-64 (programming section 320-324). System will report as Burg(130) if programmed as FF.
- 5) If using Aux input (PGM2) verify Aux input report codes are setup properly (programming section 329:4). System will report as Fire (110) if programmed as FF.
- 6) To enable reporting of the Period Test Transmission, program the "periodic Test Transmission" ([348]:[4]) and the "Periodic Test Transmission with Trouble" ([348]:[3]) reporting codes to "02".
- 7) All other reports are hardcoded in the gateway and cannot be changed regardless of what is entered in the programmed location.
- 8) Format and account number have no effect on reporting.

IGM Connection

- 9) Disarm the system (all partitions)
- 10) Power down the DSC system.
- 11) Set RE927X panel selector switch to DSC
- 12) Connect the DSC Panel and RE927X as shown in the Wiring Instructions above.
- 13) Apply power to the DSC system.
- 14) The DSC control panel will begin automatic configuration. This can take up to 2 minutes.
- 15) Installation complete.

Reporting Codes for DSC panels.

The following table shows all events reported when connected to a DSC Panel.

Event	Report Code
AC Fail/Restore	301
Panel Low Battery/Low Battery Restore	302
Opening/Closing Report	400
Cancel Report	406
Zone Alarm	See below
Keypad fire panic	110
Keypad aux panic	100
Keypad police panic	120
Duress	121
Periodic Test Transmission	602
Periodic Test with Trouble Transmission	608

IMPORTANT: Automatic Contact ID is not supported. Manually programmed reporting codes are only supported for alarms on zones 1-64 ([320] – [324]) and for alarms on the PGM2/Aux input ([329]:[4]). The PGM2/Aux input is reported as zone number 99.

If Report Codes have not been manually programmed for zone alarms, zone alarm reporting codes default to:

- Any zone alarm (zones 1-64): Code 1130 (Burglary)
- PGM2/Aux input (zone 99, likely a 2-wire Smoke): Code 1110 (Fire)

Be sure to verify that all codes are being properly reported to the central station after you have installed the communicator module or modified any reporting program settings in the DSC installer programming menu.

Caddx NX Programming and Connections

Compatible with all NX series panels.

Account Setup

- 10) Refer to IGM account setup instructions on page 2 and set up the account on the Dealer Portal.
- 11) **Be sure to add a contact that uses the system MASTER CODE to the account before connecting the module. This will ensure the module can properly communicate with and configure required system settings.**

Panel Programming

- 12) None Required

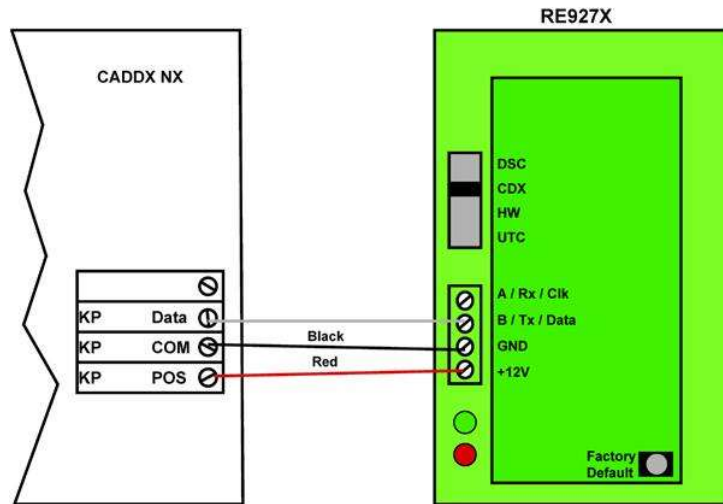
IGM Connection

- 13) Disarm the system (all partitions).
- 14) Power down the NX system.
- 15) Set the RE927X panel selector switch to CDX.
- 16) Connect the NX panel and the RE927X as shown in the Wiring Instructions above.
- 17) Apply power to the NX system. During this process, the communicator will program the following settings:
 - Enable Opening and Closing report.
 - Set Telephone Line Cut delay to 0 (no TLM).
- 18) Installation complete.

Important: Do not attempt to enter program mode until the CS and Platform LEDs have stopped flashing.

Additional Notes for NX installations:

- Some NX panels limit the number of non-keypad devices they support. Be sure that the panel you are connecting the communicator to does not have more than the number of support devices connected.
- User codes that are added to the system or edited through the communicator will have the default or previous partitions enabled. If you desire the users to have different partitions enabled, you will need to modify the partitions thru the NX keypad.
- 6-digit access codes are not supported.



Concord Programming and Connections

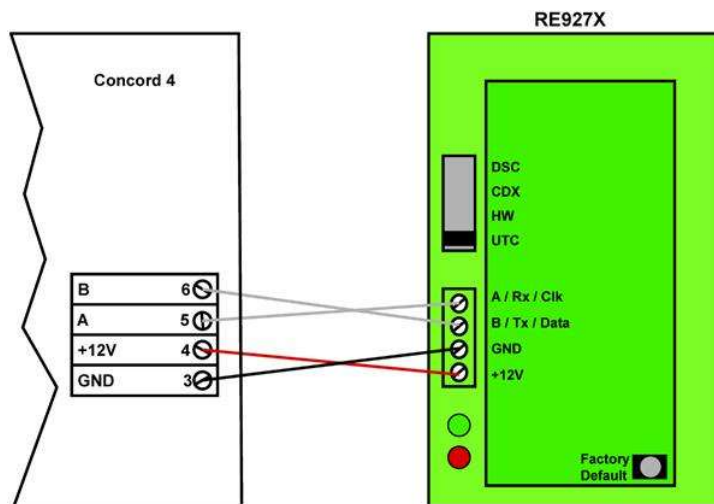
Compatible with Concord 4.

Account Setup

- 1) Refer to IGM account setup instructions on page 2 and set up the account on the Dealer Portal.
- 2) **Be sure to add a contact that uses the system MASTER CODE to the account before connecting the module. This will ensure the module can properly communicate with and configure required system settings.**

Panel Programming

- 3) Using the System's Installers Code:
 - a) **Turn off ACCESS CODE LOCK (0003).**
 - b) Delete phone numbers for CS1-CS3 (01000 – 01020).
 - c) Turn on OPENING REPORTS for partition 1 (06100).
 - d) Turn on CLOSING REPORTS for partition 1 (06101).
 - 4) If there is an automation or wireless reporting device (i.e. automation module, cell backup module) already connected to the panel, remove the device and delete from the panel. Concord 4 only supports 1 automation bus device.
- ### IGM Connection
- 5) Disarm the System (all partitions).
 - 6) Power down the Concord System.
 - 7) Set the RE927X selector switch to UTC
 - 8) Connect the Concord panel and the RE927X as shown in the Wiring Instructions above.
 - 9) Apply power to the Concord System.
 - 10) If this is the first time the module is powered with the panel:
 - Do not press any keys on the keypad for the first 2 minutes after power up.
 - After 2 minutes, initiate a bus scan (8+installer code+01)
 - Do not press any keys on the keypad for 1 minute after you have performed the bus scan.
 - 11) If the CS or Platform LED is still blinking refer to "Trouble Shooting the Panel Connection".
 - 12) It is normal for the keypad to display "Enter Light Key" a few times after connecting the module to the panel. If the keypad continues to display "Enter Light Key", verify you have the correct system master code setup in the account.
 - 13) Installation is complete.



IMPORTANT: Be sure to turn Off ACCESS CODE LOCK before adding the module!

Operation

Event Reporting

Events are reported to both the monitoring receiver and the interactive server. All events use Contact ID reporting codes. The following events are reported by default:

Alarms	System Low Battery
Alarm cancels	System Low Battery Restoral
Openings	AC Power Fail (delayed by some panels)
Closings	AC Power Restoral (delayed by some panels)

Vista Only:

Additional events can be enabled for reporting if desired, by enabling the desired event reports in system programming.

Interactive Control

The system can be controlled remotely through the Smartlink app and website.
The arm/disarm control and status applies to partition 1 only.

Z-Wave

Z-Wave devices can be added and controlled via the 'Devices' section in the Smartlink app and website.

Using the RE927X as a Backup

In backup mode, the RE927X will send events to the Central Station server and to the interactive server, in the event that the Primary communicator is unable to do so.
In Backup Mode, only event reporting is supported.

Configuring RE927X Backup Mode

Wire both the RE927X and the primary communicator (RE920X or RE926X) to the alarm panel's data bus (as indicated in the wiring instructions).

When power is applied to the alarm panel, the RE927X will detect the presence of the primary communicator within 30 seconds, and enters Backup Mode.

If no Primary Communicator is detected, the RE927X will enter Primary Mode.

NOTE: The subscriber account must be configured to use both Primary and Backup gateways. Refer to the Dealer Portal User Guide for details.

Troubleshooting

If the “CS or “Platform” LEDs are blinking, here are possible problems:

- Incorrect wiring.
- Incorrect panel switch position.
- Unsupported panel version.
- Unsupported panel model.
- Panel is in Installer Program Mode.

Vista Specific:

- AUI not enabled.
- AUI used for some other function.
- LRR not enabled.
- Another LRR or IP/GSM device connected to panel bus.

Concord Specific:

- Module not enrolled into the Concord Bus (perform another bus scan)
- Another Automation device is enrolled on the Concord Bus.

Factory Default Button

This button has two functions:

- Holding this button for approximately 5 seconds will reset the RE927X Communicator.
- Holding this button for approximately 10 seconds (LEDs will flash off twice) will set the RE927X to factory defaults.

Links

Smartlink homepage	http://www.smartlinkafrica.co.za
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Notices

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Disclaimer:

1. The manufacturer and/or its agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the correct or incorrect use of the system or it’s peripherals. The purchaser assumes all responsibility in the use of the system and its peripherals.
2. While every effort has been made to ensure the accuracy of this manual, the manufacturer assumes no responsibility or liability for any errors or omissions. Due to ongoing development, product specifications and the contents of this manual are subject to change without notice.

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