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## Galaxy Dimension GD-48

### GENERAL INFORMATION

**SIMPLWINDOWS FILE NAME:** C3 Galaxy Dimension GD-48.umc

**CATEGORY:** Security

**CURRENT VERSION:** 2.06

**PROGRAMMER:** GO

**SUMMARY:** This module controls a Galaxy Dimension GD-48 alarm system over RS-232.

### GENERAL NOTES:

The Galaxy Dimension GD-48 alarm system provides up to 48 zones divided over 6 RIO's. (Remote Input/Output) Each RIO consists of 8 zones.

The GD-48 alarm system has two RIO's connected to the PCB and allows for 1 Bus Line with 4 extra RIO's. 6 RIO's with 8 zones on each makes 48 zones. This is summed up in the table at the end of this document.

The GD-48 allows for a maximum of 4 groups.

#### Galaxy Setup:

The Galaxy must be set up correctly otherwise the Crestron will NOT be able to log on.

1. Enter Galaxy Engineer mode – Enter 'engineer' PIN + [ent] from a Galaxy panel
2. Enter 56. COMMUNICATIONS
3. Enter 6. INT RS-232 1
4. Enter 1. Mode = 2. DIRECT [esc] to backup
5. Enter 2. FORMAT
6. Enter 1. SIA = 4
7. Enter 3. ACCOUNT NO. = remote login code
8. Enter 4. COMMS SETUP
9. Set the Baud rate, data bits, stop bits & parity from the sub menus
10. Repeat [esc] to return to the Engineer page
11. Enter 'engineer' PIN + [esc] to exit. The unit will then run a tamper test & return to normal operation

#### IMPORTANT NOTE:

The company installing & commissioning the Galaxy Panel must enable the **Remote** code using the Honeywell RSS (Remote Servicing Suite) software. The Remote code must match the module 'remote login code' parameter. Failure to set this up will mean that the Crestron will NOT be able to login to the Galaxy.

#### Module Initial setup:

Enter the login code in the 'remote login code' parameter field. This should have been setup in the Galaxy already by the installation engineer. If not the default is 543210.

On first use the module's [keypad.fb\$] will report 'No PIN stored for Crestron. Enter new PIN & press [ent] when done'. Enter the PIN that will be used on a day to day basis by the user. This should be the same as the PIN the user would enter at a Galaxy keypad. Once the PIN has been set in the module the message 'PIN stored' will be displayed momentarily on the [keypad.fb\$] followed by the value in the 'banner' parameter. DO NOT enter the 'remote login code' here.

#### Operation:

The module must be logged in to operate any Galaxy functions. Assert login and the module will attempt to connect to the Galaxy using the PIN from the 'remote login code' parameter field. Once logged in the module will be enabled, all functions are available and the module will start polling.

\* Setting & un-setting: Using the keypad is similar to a Galaxy keypad.

Set: Enter PIN, Press [A] for full set or [B] to part set.

Unset: Enter PIN & press [ent]

\* Cancelling an alarm, fault or tamper: Key in a valid PIN followed by [ent]

\* Resetting: After an alarm, fault or tamper has occurred the system must be reset.

1. Clear the cause of the alarm, fault or tamper

2. Key in a valid PIN followed by [ent]

3. Review the alarm, fault or tamper status of the [busn.riox.zonez.fb] outputs.

C3 Custom Code Crafters (Europe) Ltd.

One, The Market Place, Station Road, Thorpe-Le-Soken, Essex, CO16 0HQ.

Telephone: +44 (0) 1255 862850 Fax: +44 (0) 1255 863909 Internet: <http://www.C3-eu.com>



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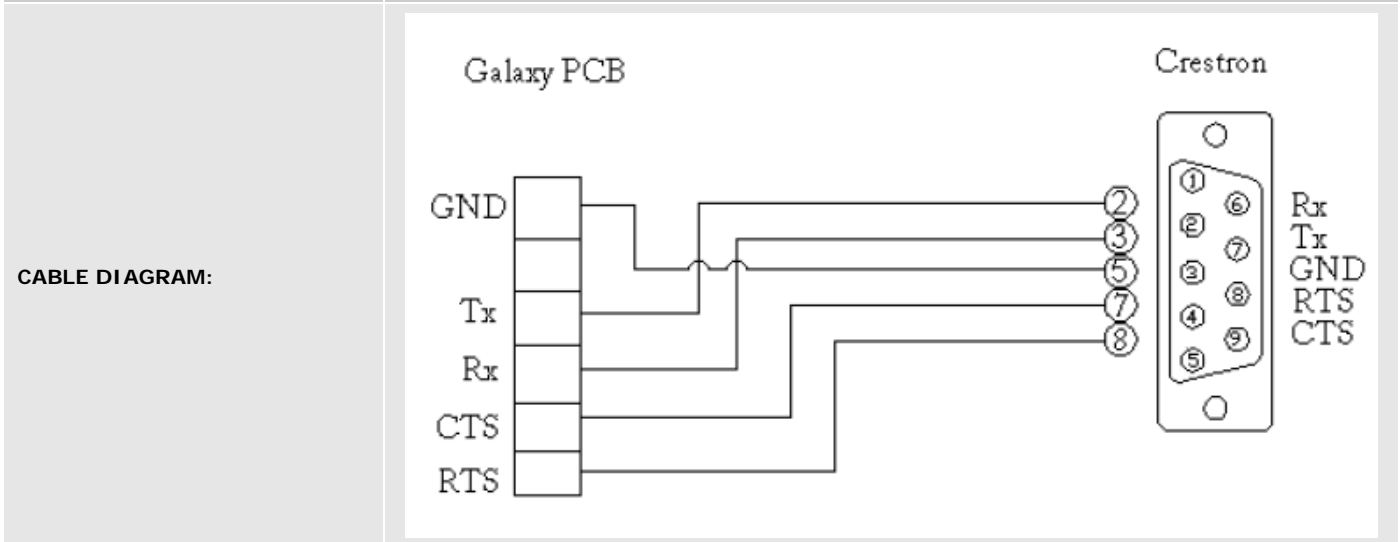
There are 'quick' digital inputs that can be used to test the Galaxy operation but these should be hidden from the end user. These are marked below '(not for general use)'

All inputs enclosed [ ] are optional. Read the Galaxy documentation if in doubt.  
**Please Note: This module is for the GD-48 only**

**XPanel Setup: (Galaxy Dimension demo program.vtp)**

- Open the demo program .vtp file
- Right click the project and select 'Properties'
- From the project properties dialog, select the 'Web' tab
- The IP ID will match the XPanel in the demo program. (Set as required)
- Set the IP address in e-control Gateway Info to match the processor
- Press [OK] and compile (F12)
- Run the XPanel application

**COMMS SETUP:** (Default) 9600, 8, 1,N. Handshaking: None. RTS/CTS is not used.  
 Tested up to 57600. NOTE: When setting the baud rate ensure the Galaxy baud rate is set to match. Consult Galaxy documentation on how to set this up.



**INPUT DEFINITIONS**

<b>rx\$:</b>	<b>S</b>	Data from Galaxy unit. Connect to RS-232 tx\$
<b>login</b>	<b>D</b>	Log on to unit & enables polling and alarm control
<b>logout</b>	<b>D</b>	Log off the unit. Alarm control disabled. (NACK sent from unit - this is normal)
<b>[user.pin.reset]</b>	<b>D</b>	Pulse to reinitialise the user PIN. This will prompt: 'No PIN stored for Crestron. Enter new PIN & press [ent] when done'. The PIN will then be stored in the module for verification
<b>[enable.toggle]</b>	<b>D</b>	Pulse to enable/disable the module (default is polling enabled)
<b>[enable.on]</b>	<b>D</b>	Pulse to enable the module and start polling
<b>[enable.off]</b>	<b>D</b>	Pulse to disable the module. Note: If disabled entering any number key will enable polling for 30s.
<b>[group.status]</b>	<b>D</b>	Pulse to poll once for the group status (set, unset, partially set)
<b>[alarm.status]</b>	<b>D</b>	Pulse to poll once for the group alarm status (normal, alarm, reset required)
<b>[zone.status]</b>	<b>D</b>	Pulse to poll once for the RIO zone status.
<b>[numeric, *# keys]</b>	<b>D</b>	Connect to keypad on touchpanel for PIN entry

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[A]	D	Full alarm set
[B]	D	Partial/Group set alarm
[ent]	D	Enter key
[esc]	D	Back out of the current operation.
[group.nn.unset]	D	Pulse to unset group nn (not for general use)
[group.nn.set]	D	Pulse to set group nn (not for general use)
[group.nn.part.set]	D	Pulse to partially set group nn (not for general use)
[group.nn.reset]	D	Pulse to reset group nn (not for general use)
[all.unset]	D	Pulse to unset all groups
[all.set]	D	Pulse to set all groups
[all.part.set]	D	Pulse to part set all groups
[all.reset]	D	Pulse to reset all groups
[include.busn.riox.zonez]	D	Set these inputs high to include the corresponding zone (fb). Set low to exclude. When a zone is excluded it does not get checked when the alarm is set. Use this if you are working on an incomplete alarm system. These inputs default to '1' when the module is inserted in the program. Remember to set them accordingly as zones become available

## OUTPUT DEFINITIONS

tx\$:	S	Data to unit. Connect to RS-232 rx\$
[login.fb]	D	Galaxy unit is logged on
[ack.fb]	D	1s pulse each time a valid command is acknowledged
[nack.fb]	D	1s pulse when a command is rejected if unit is logged off or command not recognised
[activity.fb]	D	0.1s pulse each time a Zone, Group or Alarm activity is detected
[system.online.fb]	D	Indicates that the module is able to communicate with the alarm panel
[enable.poll.fb]	D	Enable status feedback
[timer.fb]	A	Countdown timer indicating time remaining before alarm is set
[system.open.fb]	D	Indicates that the alarm was being set while the system is still open. Use this tally to take the user to a page indicating which zones are still open
[keypad.fb\$]	S	Keypad information. Shows error messages, alarm status messages and ***** when PIN entered. Includes MSP of 80 characters
[system.msg.fb]	S	Service messages. Not for the end user
[pin.verified.fb]	D	Indicates that the user entered PIN is valid
[pin.status.fb]	A	Indicates the status of the stored PIN. 0d:Not stored 1d:Stored
[group.nn.unset.fb]	D	High when group nn is unset and while [group.nn.unset] is asserted. (pulse the [group.status] input to get this information if polling is disabled)
[group.nn.set.fb]	D	High when group nn is set and while [group.nn.set] is asserted. (pulse the [group.status] input to get this information if polling is disabled)

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[group.nn.part.set.fb]	D	High when group nn is partially set and while [group.nn.part.set] is asserted. (pulse the [group.status] input to get this information if polling is disabled)
[group.nn.alarm.reset.req.fb]	D	High when group nn needs to be reset and while [group.nn.reset] is asserted. (pulse the [alarm.status] input to get this information if polling is disabled)
[group.nn.alarm.normal.fb]	D	High when the alarm of group nn is normal (pulse the [alarm.status] input to get this information if polling is disabled)
[group.nn.alarm.triggered.fb]	D	High when the alarm of group nn is triggered (pulse the [alarm.status] input to get this information if polling is disabled)
[all.unset.fb]	D	High if one or more groups are unset
[all.set.fb]	D	High if one or more groups are set
[all.part.set.fb]	D	High if one or more groups are part set
[all.reset.req.fb]	D	High if one or more groups require reset
[all.alarm.normal.fb]	D	High if one or more group alarms are normal
[all.alarm.triggered.fb]	D	High if one or more group alarms are triggered
[busn.riox.zonez.fb]	D	High when zone z on RIO x on Bus n is active

## PARAMETERS

remote login code	(s)	Code required for remote login to the unit only. See <b>GENERAL NOTES</b>
max user digits	(d)	Set the maximum number of characters for the user PIN
poll interval	(s)	Set the poll interval in seconds
full set exit time	(s)	Set the timed exit length for full set. Valid range: 5-320s (default: 60s)
part set exit time	(s)	Set the timed exit length for part set. Valid range: 0-320s (default: 5s)

## REVISION NOTES

2.06	GO	<ul style="list-style-type: none"><li>Changed polling routine so that no polling occurs until a successful logon has been made</li><li>Amended help file to include Galaxy setup procedure</li><li>Changed parameter 'login pin' to 'remote login code'</li><li>Updated help file to reflect parameter change above. Includes more detail on setting up the Galaxy Panel</li><li>Updated help file to include XPanel setup</li></ul>
2.05	GO	<ul style="list-style-type: none"><li>Added polling routine to keypad numeric keys if module is disabled. This will poll the alarm for 30s</li><li>Added momentary fb to group buttons when pressed after a user requested this</li><li>Added [system.msg.fb] output for alarm debugging</li></ul>
2.04	GO	<ul style="list-style-type: none"><li>Added [include.busn.riox.zonez] inputs and associated logic</li><li>Improved polling method requiring less system resources</li><li>Added new error checking logic if attempt to set the system while open</li></ul>
2.03	GO	<ul style="list-style-type: none"><li>Revision to string &amp; data handling logic</li><li>Added timed exit logic on full and part set</li></ul>
2.02	GO	<ul style="list-style-type: none"><li>Minor logic changes</li><li>Added new text subsystem for user feedback to keypad</li></ul>

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2.01	GO	<ul style="list-style-type: none"> <li>Added [all group inputs &amp; outputs] and logic</li> <li>Revised polling method</li> </ul>
2.00	GO	<p>Initial release</p> <ul style="list-style-type: none"> <li>Added keypad inputs</li> <li>New login and detection logic</li> <li>Added SystemBuilder compatibility</li> <li>New string &amp; data handling logic</li> </ul>
<b>COMMENTS:</b>		<ul style="list-style-type: none"> <li>The * and # keys currently serve no function. They are included in the module definition as placeholders only.</li> <li>This module 'should' work with a Honeywell C-series alarm panel but please note this has not been tested by C3 and we make no guarantee that it will perform as expected with this system</li> </ul>

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## Additional information

### GD-48 RIO BUS LINE TABLE

PCB	BUS LINE 1	BUS LINE 2	BUS LINE 3	BUS LINE 4
Bus 1 RIO 0 Bus 1 RIO 1	Bus 1 RIO 2 Bus 1 RIO 3 Bus 1 RIO 3 Bus 1 RIO 4 Bus 1 RIO 5	NA	NA	NA

Help file compiled by: GO  
 Help file checked by: TH  
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 Released: 11/02/10

C3 Custom Code Crafters (Europe) Ltd.  
 One, The Market Place, Station Road, Thorpe-Le-Soken, Essex, CO16 0HQ.

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