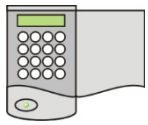
The Galaxy Driver



The Galaxy driver connects to the Honeywell Security range of Galaxy alarm systems. Available for Commander and ObSys.

This document relates to Galaxy driver version 1.2

Please read the *Commander Manual* or *ObSys Manual* alongside this document, available from *www.northbt.com*

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Compatibility with the Galaxy System

The Galaxy driver allows North to interface with a Honeywell Security (previously Ademco Microtech) Galaxy alarm system.

The driver connects to the Galaxy panel via a serial RS232 connection. Depending on the panel type, the connection may be on-board (Fig. 1) or external (Fig.2).

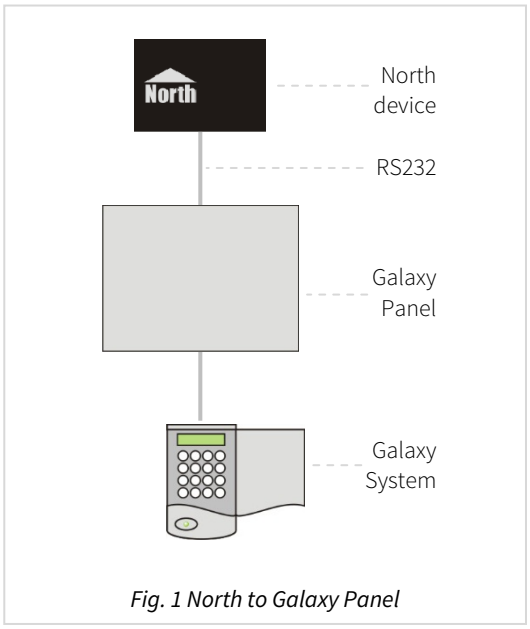

Fig. 1 North to Galaxy Panel

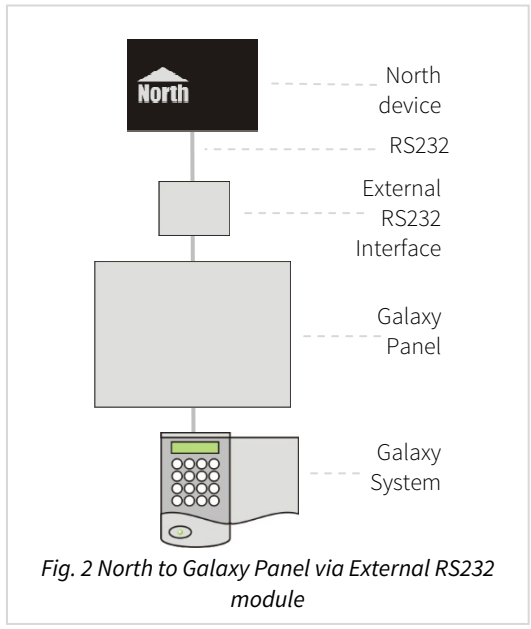

Fig. 2 North to Galaxy Panel via External RS232 module

Equipment

The following ranges are compatible with the driver:

- Galaxy Classic Panel – 8/18/60/500/512 zone panel
- Galaxy Series 3 Panel with on-board RS232 – 3-48C, 3-144C, 3-520C
- Galaxy Series 3 with external RS232 module – 3-144, 3-520
- Galaxy Dimension with on-board RS232 – GD-48, GD-96, GD-264, GD-520

Galaxy 3 Series panels, with a model reference ending with 'C', and Dimension panels support an on-board RS232 port. E.g. models 3-48C, 3-144C etc. All other Galaxy 3 Series panels and Galaxy Classic ranges require an optional RS232 module fitting to line 1.

Values

Depending on the type of Galaxy panel connected, the driver can typically access the following values:

- Groups
- Output types
- Zone Types
- RIO outputs
- Zones

In order to read values back from groups, outputs and zones, they must be set up within the Galaxy panel.

Galaxy panels can send alarms to the Galaxy driver.

Prerequisites

The Galaxy system must be pre-configured to allow the North device to access its values. Depending on the RS232 interface (on-board or external), use the following information to set up the Galaxy system.

Configure External RS232 Interface Module

If required, the Galaxy RS232 module must be installed on line 1. Configure the 8-way DIP switch as follows:

Switch	Use	Required Setting
1	Protocol: RS232	Off
2	Stop Bits: 1	Off
3	Data Bits: 8	Off
4	Parity: n/a	Off
5	Parity Enable: None	Off
6	Baud Rate: 38400	On
7	Baud Rate	On
8	Baud Rate	On

Check the RS232 module is configured by viewing LED LD1. This will flash once per second (0.1 sec on, 0.9 sec off) to indicate normal communications between the RS232 module and panel. Refer to the Galaxy document IO1-0054 for more information.

Configure the External or On-board RS232 Port from the Galaxy Panel

Use the Galaxy keypad to configure the RS232 module. Engineer Mode should be enabled first (the default engineer code is 112233).

- Go to option [56] Communications
- Select either option [2] Ext RS232 (external RS232 module); or option [6] Int RS232 (for panels with internal RS232 port)
- Set [1] Mode to Direct
- Set [2] Format to SIA, level 4. Then from the list of trigger events, select which you would like sent to the North device
- Set [3] Account No. to a 4-6 digit number. This has to be set up in order to receive any alarms from the system.
- For the on-board RS232 port also set [4] Comms Setup: Baud Rate 38400; Data Bits 8; Stop Bits 1; Parity No Parity.

Refer to the Galaxy Programming Manual for more information.

NOTE: If the Galaxy panel is in engineering mode, the Galaxy driver will be unable to log onto the Galaxy system.

Remote Access Password

The Remote Access code has a default value of 543210. If this has been changed during engineering of the panel, note the new value – this will be configured in the Galaxy Setup object later.

For a Series 3 panel, this is the code found in the last user; e.g. user 250's code on a 3-144 panel or user 999's code on a 3-520 panel. This code cannot viewed from the keypad.

Using the Driver

On ObSys, the Galaxy driver is pre-installed. On Commander, the Galaxy driver is available to download in the file 'Bank10 Galaxy.cdm'. On all of these North devices, you can use the driver to create an interface to Galaxy system. Once started, you will need to set up the driver before it can communicate with the Galaxy system.

Making the Cable

Using the following RS232 cable specification, connect the North device COM port to the Galaxy on-board terminal block (Fig. 3) or external module (Fig. 4). Connector types at each end of the cable are shown.

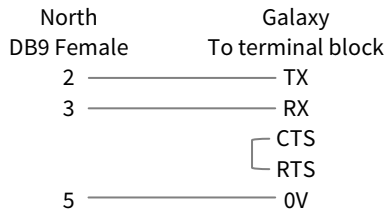

Fig. 3 North to Galaxy cable

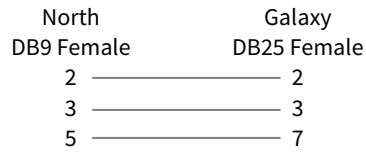

Fig. 4 North to Galaxy cable

The maximum RS232 cable length is 15m and should be as short possible.

Cables are available from North, order code CABLE/GALAXY/TERM and CABLE/GALAXY/DB25.

Starting the Interface

💻 To start an interface with the Galaxy driver, follow these steps:

- → **Start Engineering** your North device using ObSys
- → Navigate to **Configuration, Interfaces,** and set an unused **Interface** to 'Galaxy' to start the particular interface
- → Navigate to the top-level of your North device and re-scan it

The driver setup object (Mc), labelled **Galaxy Setup**, should now be available. If this object is not available, check an interface licence is available and the driver is installed.

Setting up the Driver

💻 To set up the driver, follow these steps:

- → Navigate to the **Galaxy Setup** object. For example, if you started interface 1 with the driver earlier, then the object reference will be 'M1'
- → Set **RS232 Com port** object (RS.COM) to select which serial port number on the North device the Galaxy system is connected to.
- → Set the **Baud Rate** to 38400, this should match the baud rate set in the external/onboard RS232 module
- → Set the **Byte Format** to N81, this should match the parity, data bits and stop bits set in the external/onboard module
- → Enter the **Remote access password** - this can be taken from the Galaxy panel. Refer to the Pre-requisites section in this document for more information.
- → Set the **Panel Type** object to match the panel you are connecting to, details on the available panel types and their objects can be found in the Object Specification section of this document

Checking Communications

You can check that the interface is communicating by reading the **Panel Connected** object (DS). A value of 'Yes' indicates the driver has connected to, and is communicating with, the Galaxy system.

Alarms

When the Galaxy system reports an alarm to the driver, the driver sends a North-format alarm to the device's alarm processing.

Format

North-format alarms contain six text fields. The Galaxy driver places the following information into these fields:

System – copied from System Label object (DL) within driver setup

Point – Alarm identifier in the format: Group *x* User *x* Module *x* Zone *x*
(when *x* is '0', the field will be omitted)

Condition – see Condition & Priority Fields section below

Priority – see Condition & Priority Fields section below

Date & Time – from North device

Examples

System	Point	Condition	Priority	Date	Time
Galaxy system	Group 10 Zone 1012	Burglar Alarm	2	23/03/12	13:24:26
Galaxy system	Group 6 Zone 4154	Door Forced	2	23/03/12	13:24:27

Condition and Priority Fields

The following alarm conditions and priorities can be sent by the driver:

Condition	Priority
Power OK	3
Power Fault	3
Burglar Alarm	2
Burglar Detector Isolated	3
Burglar Alarm Cancelled	3
Burglar Detector OK	3
Burglar Detector Rest	3
Burglar Detector Fault	3
Burglar Detector De-Isolated	3
Burglar Detector Test	3
Auto Arming	3
Arming Extended	3
Area Armed	3
Arming Fault	3
Armed	3
Recently Armed	3
Late to Disarm	3
Door Forced	2
Access Granted	3
Access Lockout	3
Fire Alarm	1
Fire Detector Isolated	3
Fire Detector OK	3
Fire Detector Reset	3
Fire Detector Fault	3
Fire Detector De-Isolated	3
Fire Detector Test	3
Holdup Alarm	1
Holdup Device Isolated	3
Holdup Device OK	3
Holdup Device Reset	3
Holdup Device Fault	3
Holdup Device De-Isolated	3
Wrong Code	3
Time Changed	3

Condition	Priority
Local Programming Activated	3
Local Programming Deactivated	3
Telephone Line OK	3
Telephone Line Fault	3
Disarmed Early	3
Disarmed	3
Disarmed and Reset	3
Panic Alarm	1
Panic Device Isolated	3
Panic Device OK	3
Panic Device Reset	3
Panic Device Fault	3
Panic Device De-Isolated	3
Relay Closed	3
Remote Programming Denied	3
Relay Open	3
Automatic Test	3
Power Up	3
Remote Programming Activated	3
Manual Test	3
Tamper Alarm	2
Test Deactivated	3
Tamper Alarm Reset	3
Test Activated	3
Communications Fault	3
Communications OK	3
Battery OK	3
Battery Fault	3

Object Specifications

Once an interface is started, one or more extra objects become available within the top-level object of the device. As with all North objects, each of these extra objects may contain sub-objects, (and each of these may contain sub-objects, and so on) - the whole object structure being a multi-layer hierarchy. It is possible to navigate around the objects using the ObSys Engineering Software.

Each object is specified below, along with its sub-objects.

Example Object Reference

An example of a reference to an object in the same device: the Galaxy System (S1) may contain an alarm status in Group 1 (G1.S). Therefore, the object reference will be 'S1.G1.S'.

An example of a reference to an object in a different device: the IP network object (IP) contains Default Commander object (CDIP), which contains the object above (S1.G1.S) – therefore the complete object reference is 'IP.CDIP.S1.G1.S'.

Device Top-Level Objects

When an interface is started using the Galaxy driver, the objects below become available within the top-level object of the device. For example, if interface 1 is started, then the object references 'M1' and 'S1' become available.

Description	Reference	Type
Galaxy Setup Set up the Galaxy driver, started on interface *c* (*c* is the interface number)	M*c*	Fixed Container: On the Commander platform this will be *[CDM v20\Galaxy v12]* On the ObSys platform this will be *[OSM v20\Galaxy v12]*
Galaxy System Access Galaxy system connected to interface *c* (*c* is the interface number)	S*c*	Fixed Container, one of the following: Dimension 48 zone panel *[Galaxy v12\GD-48]* Dimension 96 zone panel *[Galaxy v12\GD-96]* Dimension 264 zone panel *[Galaxy v12\GD-264]* Dimension 520 zone panel *[Galaxy v12\GD-520]* Series 3-144 or 3-48 panel *[Galaxy v12\G3-144]* Series 3-520 panel *[Galaxy v12\G3-520]* Classic G8 panel *[Galaxy v12\G8]* Classic G18 panel *[Galaxy v12\G18]* Classic G60 panel *[Galaxy v12\G60]* Classic G500 panel *[Galaxy v12\G500]* Classic G512 panel *[Galaxy v12\G512]*

Galaxy Driver Setup

Object Type: *[OSM v20\Galaxy v12]*
Object Type: *[CDM v20\Galaxy v12]*

The Galaxy driver contains the following objects:

Description	Reference	Type
RS232 COM Port	RS.COM	Obj\Num: 1…8; Adjustable
Baud Rate A rate of 38400 baud is recommended	RS.BR	Obj\Num; Adjustable Values: 1200, 4800, 9600, 19200, 38400
Byte Format	RS.BF	Obj\Enum: 0…11; Adjustable Values: 0=N81, 1=N82, 2=N71, 3=N72, 4=O81, 5=O82, 6=O71, 7=O72, 8=E81, 9=E82, 10=E72, 11=E71
Remote access password The default remote access password is '543210'. When the password is changed, the driver will re-log-on. **NOTE: If an incorrect password is entered, the panel may prevent a re-attempt for 10 minutes.**	PSW	Obj\Text; Adjustable
Device Label	DL	Obj\Text: 20 chars. ; Adjustable
Panel Type	DT	Obj\ENum: 0…10; Adjustable Values: 0=Classic G8, 1=Classic G18, 2=Classic G60; 3=Classic G500; 4=Classic G512, 5=Series 3-48C & 3-144, 6=Series 3-520, 7=Dimension GD-48, 8=Dimension GD-96, 9=Dimension GD-*264, 10*=Dimension GD-520
Panel Connected	DS	Obj\NoYes

Dimension 48 Panel

Object Type: *[Galaxy v12\GD-48]*

The Galaxy Dimension 48 panel supports:

- One line for IO
- On-board IO: 2 RIO, supporting a total of 16 zones, 8 outputs
- RIOs, RF RIOs and PSU modules; 4 modules per line, each supporting 8 zones and 4 inputs

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…8	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…1054. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…81. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…1058. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Dimension 96 Panel

Object Type: *[Galaxy v12\GD-96]*

The Galaxy Dimension 48 panel supports:

- Two lines for IO
- On-board IO: 2 RIO, supporting a total of 16 zones, 8 outputs
- RIOs, RF RIOs and PSU modules; 4 modules per line, each supporting 8 zones and 4 inputs

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…16	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…2054. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…81. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…2058. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Dimension 264 Panel

Object Type: *[Galaxy v12\GD-264]*

The Galaxy Dimension 264 panel supports:

- Two lines for IO
- On-board IO: 2 RIO, supporting a total of 16 zones, 8 outputs
- RIOs, RF RIOs and PSU modules; 16 (15 on line 1) modules per line, each supporting 8 zones and 4 outputs

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…32	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…2154. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…81. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…2158. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Dimension 520 Panel

Object Type: *[Galaxy v12\GD-520]*

The Galaxy Dimension 520 panel supports:

- Four lines for IO
- On-board IO: 2 RIO, supporting a total of 16 zones, 8 outputs
- RIOs, RF RIOs and PSU modules; 16 (15 on line 1) modules per line, each supporting 8 zones and 4 outputs

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…32	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…4154. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…81. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…4158. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Series 3-144 and 3-48 Panel

Object Type: *[Galaxy v12\G3-144]*

The Galaxy Series 3-144 or Series 3-48 panel supports:

- Two lines for IO
- On-board IO: 2 RIO, supporting a total of 16 zones
- RIOs, RF RIOs and PSU modules; 9 modules per line, each supporting 8 zones and 4 inputs

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…32	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…2084. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…76. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…2088. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Series 3-520 Panel

Object Type: *[Galaxy v12\G3-520]*

The Galaxy Series 3-520 panel supports:

- Four lines for IO
- On-board IO: 2 RIO, supporting a total of 16 zones, 8 outputs
- RIOs, RF RIOs and PSU modules; 16 modules per line, each supporting 8 zones and 4 inputs

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…32	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…4154. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…75. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…4158. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Classic G8 Panel

Object Type: *[Galaxy v12\G8]*

The Galaxy Classic G8 panel supports:

- On-board IO: up to 8 zones, 6 outputs
- 1 MAX access control device

In order to read values back from groups, outputs and zones, they must be set up within the Galaxy panel.

Description	Reference	Type
Output *b* – Status The output number, *b,* is in the range: 1001…1002, 1011…1014. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Zone *d* The zone number, *d,* is in the range 1001…1008. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, e, is in the range 1…52. Refer to the Galaxy Engineer Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Classic G18 Panel

Object Type: *[Galaxy v12\G18]*

The Galaxy Classic G18 panel supports:

- On-board IO: up to 10 zones, 6 outputs
- 1 RIO module, with 8 zones and 4 outputs each
- 2 MAX access control devices

In order to read values back from groups, outputs and zones, they must be set up within the Galaxy panel.

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…3	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…1002, 1011…1014, 1021…1024. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…75. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001, 1002, 1011…1018, 1021…1028. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Classic G60 Panel

Object Type: *[Galaxy v12\G60]*

The Galaxy Classic G60 panel supports:

- On-board IO: up to 12 zones, 6 outputs
- 6 RIO modules, with 8 zones and 4 outputs each
- 4 MAX access control devices

In order to read values back from groups, outputs and zones, they must first be set up within the Galaxy panel.

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…4	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…1074. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…75. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…1068. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Classic G500 Panel

Object Type: *[Galaxy v12\G500]*

The Galaxy Classic G500 panel supports up to 4 outputs (on-board), 63 RIO and 16 MAX access control devices. Each RIO module contains 8 zones and 4 outputs.

In order to read values back from groups, outputs and zones, they must first be set up within the Galaxy panel.

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…16	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…4154. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…75. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…4158. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Classic G512 Panel

Object Type: *[Galaxy v12\G512]*

The Galaxy Classic G512 panel supports up to 4 outputs (on-board), 1 smart PSU (4 outputs, 8 zones), 62 RIO modules and 32 MAX access control devices. Each RIO module contains 8 zones and 4 outputs.

In order to read values back from groups, outputs and zones, they must first be set up within the Galaxy panel.

Description	Reference	Type
Group *a* The group number, *a,* is in the range 1…32	G*a*	Fixed Container: *[Galaxy v12\Group]*
Output *b* – Status The output number, *b,* is in the range: 1001…4154. See note on *Output Address*.	O*b*.S	Obj\OffOn; Adjustable
Output Type *c* The output type number, *c,* is in the range 1…75. Refer to the Galaxy Engineer's manual for more information.	OT*c*	Fixed Container: *[Galaxy v12\OutType]*
Zone *d* The zone number, *d,* is in the range 1001…4158. See note on *Zone Address*.	Z*d*	Fixed Container: *[Galaxy v12\Zone]*
Zone Type *e* The zone type number, *e,* is in the range 1…52. Refer to the Galaxy Engineer's Manual for further information.	ZT*e*	Fixed Container: *[Galaxy v12\ZoneType]*

Group

Object Type: *[Galaxy v12\Group]*

In the Galaxy panel, a collection of zones can be assigned to a logical group number. Each group within the alarm system can be set and unset using the following objects:

Description	Reference	Type
Status	S	Obj\Enum: 0…2 (Read only), 0…5 (Adjustable) Values: 0=Unset, 1=Set, 2=Part Set, 3=System Reset, 4=Abort Set, 5=Force Set
Alarm Status	AS	Obj\Enum: 0…2 Values: 0=Normal, 1=Alarm, 2=Reset Required

Output Type

Object Type: *[Galaxy v12\OutType]*

Output types belonging to a specific group number can have their output status monitored. For example, output type 1 (bells) in group 2.

Description	Reference	Type
Group *a* – Output Status The group number, *a,* is in the range 1…32	G*a*.S	Obj\OffOn

Zone

Object Type: *[Galaxy v12\Zone]*

Each physical zone connected to the Galaxy panel has the following objects available:

Description	Reference	Type
Status	S	Obj\Enum: 0…1 Values: 0=Closed/Low/High, 1=Open/OC/SC/Fault
In Alarm	AS	Obj\NoYes
Omitted	O	Obj\NoYes; Adjustable
Soak Test	ST	Obj\OffOn; Adjustable only
Part Set	PS	Obj\OffOn; Adjustable only
Force	F	Obj\OffOn; Adjustable only

Zone Type

Object Type: *[Galaxy v12\ZoneType]*

Zones programmed with a particular type or function, e.g. zone type 2 for 'exit', have the following objects available:

Description	Reference	Type
Omitted	O	Obj\OffOn; Adjustable
Soak Test	ST	Obj\OffOn; Adjustable only
Part Set	PS	Obj\OffOn; Adjustable only

Zone Address

Each zone has a four-digit address – 1004, 4136, etc. The address contains three fields:

First digit – Panel line number, in the range 1…4. Depends on maximum lines available in the model of panel.

Second and third digits – RIO address, in the range 00…15.

Fourth digit – Zone number on RIO, in the range 1…8.

Refer to the specific Galaxy panel installation guide for details of the on-board zone addresses available.

Output Address

Each output, like a zone, has a four-digit address – 1004, 3124, etc. The address contains three fields:

First digit – Panel line number, in the range 1…4. Depends on maximum lines available in the model of panel.

Second and third digits – RIO address, in the range 00…15.

Fourth digit – Output number on RIO, in the range 1…4.

Refer to the specific Galaxy panel installation guide for details of the on-board output addresses available.

Driver Versions

Version	Build Date	Details
1.0	1/12/2001	Driver released
1.1	27/10/2003	Cache data to improve read response speed. Zone objects changed
1.2	19/2/2007	Driver updated to reflect changes in protocol. Series 3 panels have a zone number offset from Classic panels.
1.2	15/6/2009	Updated driver for Dimension panel compatibility. Driver manual updated to configure panel with SIA level 4 (previously level 3)
1.2	8/6/2012	Released for Commander v2 platform

Next Steps…

If you require help, contact support on 01273 694422 or visit *www.northbt.com/support*

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