IDS SMS Duo v2

860-07-558

Congratulations on your purchase of the IDS SMS Duo v2 module. IDS systems are powerful, versatile and highly configurable systems, which should be installed by a professionally trained installer.

This manual covers the installation of the SMS Duo v2 module. For IDS805 programming please refer to the IDS805 User Manual

Features

- Two Zone Inputs 3k3 ohm end of line supervised
- Two relay outputs
- Can be connected to an IDS805 or operate as a standalone unit
- Communication fail is reported if the SMS Duo v2 losses communication with the IDS805
- Missed call function

Function

The SMS Duo v2 unit has been designed to work with the IDS805 alarm panel as a virtual keypad or as a standalone system with 2 inputs and 2 outputs.

IDS805 Integration

The SMS Duo v2 connects to the IDS805 keypad bus as a second keypad and supports the following functionality:

- Away Arm, Stay Arm and Arm Status
- Disarm
- Zone bypass, Unbypass
- Zone status
- SMS Duo v2 PGM triggering, on/off, pulse high/low and status
- Event reporting
    - Arm and disarm
    - Bypass and unbypasses
    - Zone violations while the system is armed
    - Panic and fire
    - Tampers
    - System Trouble (Nonspecific)

Please refer to the connection diagram, see figure 2, at the end of the manual for wiring information.

The LED on the interface board will come on when the module has power and has received a valid Clock and Date pulse from the IDS805 alarm, see figure 2.

Standalone Operation

The SMS Duo v2 can operate in standalone mode and supports the following functions.

- Monitoring of two 3k3 ohm end of line supervised inputs
- Triggering two outputs

Outputs

The outputs on the interface board are relay driven outputs which can be triggered in four different ways:

- Latch high.
    The relay will change from open to closed and remain until a sms is received to return to the open state
- Latch Low
    Used once the Latch high command has been sent, to return the relay to the open state
- Pulse High
    The relay will change from the open state to the closed state and return back to the open state after 3 seconds.
- Pulse Low
    The relay must be in the closed state and will change to the open state and return back to closed state after 3 seconds

Inputs

The inputs monitor for an open or closed condition. 3k3 ohm end of line resistors are required. A 3k3 resistor must be connected in series with a normally-closed type of input, and in parallel with a normally-open type of input. Applicable messages will be sent as zone 9 and zone 10.

Configuration

CN1 configures the interface board to connect either to the Xsms or the HYYP module and enables/disables the onboard zones.

- Pins 1 & 2 - SMS operation pins 1&2 not shorted
- Pins 3 & 4 - Zone 1 enable pins 3 & 4 shorted
- Pins 5 & 6 - Zone 2 enabled pins 4 & 5 shorted

There are three groups of user phone numbers. Entering phone numbers into the SMS unit is done via SMS's from a "Master Phone Number".

In the default state any cell phone can be used to enter the first "Master Phone Number", once entered the phone with that cell number must be used to enter more cell numbers or control the system.

Master Phone Number

Master phone numbers have the highest level of access to the SMS Module. Master phone numbers are allowed access to all configuration data. Only master numbers are permitted to add phone numbers to the system and allocate which partitions will report to each phone number.

Arming phone Numbers

Arming phone numbers are the second level of phone numbers. These phone numbers are permitted user rights to be able to control the Alarm Panel and receive reports.

Reporting Phone Numbers

Reporting phone numbers are at the lowest level, and access to the SMS Module is restricted to only receiving reports.

Operation

Defaulting the SMS Duo v2 module

To default the IDS SMS module:

1. Power the unit down
2. Press and hold the default button down
3. Power up the unit
4. Keep holding down the default button, until the 'GSM Status LED' comes on.

Messages

The SMS module has two capabilities:

Reporting – The SMS module sends alarm reports in human readable messages. Events being reported can be customised by each phone number.

Control – SMS messages can be sent to execute different functions on the alarm.

Each message sent to the unit must adhere to a specific format:

[code]*space***[command]** *space***[extended command]** *space***[data]**

Code – Valid alarm user code stored in the alarm panel

Command – A string that identifies the function you are accessing in the alarm panel.

Extended Command – Any supplementary information the function requires. (Not always required will depend on the function you are accessing)

Data - Any extra information the extended command requires.

NOTE: Only a single command can be sent per SMS, but multiple data values may be sent separated by a comma.

Messages are limited to 160 characters.

Messages will be rejected:

- If any part of the message is invalid
- When the user code sent is unknown by the alarm panel
- If any part of the command fails to execute
- If the message is sent from an unknown phone number
- If the command is sent by a phone number that does not have the required permission

NOTE: All commands sent will be verified with a message confirming that it was successful or unsuccessful with an explanation

Add

The "Add" command is sent to add a new authorised phone number and the owner's name to the SMS Module and its function.

Desired Action	Code	Command	Ext. Cmd	Data
Add phone number as a Master number	1234	Add	Master	Phone Number:Name
Add phone number as an Arm number	1234	Add	Arming	Phone Number:Name
Add phone number as a Reporting number	1234	Add	Reporting	Phone Number:Name
Add user name if the cell number was added without a name	1234	Cellnumber	Name	Phone Number:Name

***NOTE:** The above commands can only be sent via master phone.*

Reporting Options

The "report" command is sent to select what reports you want to receive on that phone number or if configured the name associated to the phone number.

Global – All enabled global events related are reported

Valid User Extended Commands:

Threshold – Sets the number of SMSes sent per day by the module to the phone

SMS Duo V2 Manual 700-558-01F

Off – Disables reporting to that phone that sent the SMS

Type – Sets the type of feedback the phone will receive

Types of feedback:

Full – All enabled events are reported

Reduced – Only the following will be reported: Arm/Disarm, Zone violations, Panics, Medical, Fire, AC Fail/Restore, Battery Low/Restore.

Raw – Contact ID string/ readable format

Minimal – Only the following will be reported: Keypad panic, Medical & Fire, Panic or Duress, General Trouble

Desired Action	Code	Command	Ext. Cmd	Data
Turn on global reporting for P1	1234	Report	On P1,global	Phone Number/Name

Default: On (Enables reduced reporting)

The below SMS is sent from the phone requiring the reporting to be switched off

Desired Action	Code	Command	Ext. Cmd	Data
Turn off reporting for P1	1234	Report	Off P1	Phone Number/Name

Sent from phone number wanting to change the reporting information received

Desired Action	Code	Command	Ext. Cmd	Data
Set the type of reporting to Full	1234	Report	Type Full	Phone Number/Name

NOTE: *The below SMS is sent from the phone requiring the change*

Change the number of SMSes sent to your phone

Desired Action	Code	Command	Ext. Cmd	Data
Set the reporting threshold to 5	1234	Report	Threshold 5	Phone Number/Name

Default: 20 (20 SMS sent to each phone per day)

Delete

When needing to delete a phone number or a name associated to a number.

Desired Action	Code	Command	Ext. Cmd	Data
Deleting a phone number	1234	Delete		Phone Number/Name
Deleting a name associated to a phone number	1234	Delete	Name	Persons Name

NOTE: *This is only a master phone number command.*

List

With this command a master user can list all current cell numbers that have been added to the SMS Duo v2 unit

Desired Action	Code	Command	Ext. Cmd	Data
List phone numbers	1234	List		Numbers

NOTE: *This is only a master phone number command.*

Naming

Each SMS Duo v2, Partition, zone and programmable output can be named for easier identification and interaction.

Naming the Site

Site names are used to identify individual SMS Duo v2 modules. Access to the site name command is restricted to Master Phone Numbers. Site names will always be sent with all SMSes and by default is "IDS SMS". Site names are limited to 12 characters.

Desired Action	Code	Command	Ext. Cmd	Data
Assigning a site name	1234	Site	Name	Home

NOTE for all Naming Options: *Names are case sensitive any spaces before or after the name will be part of the name. No names can be entered via the IDS805 keypad*

Partition

The IDS805 only has one partition.

This command is used to name the partition to make it easier to remember. Partition names can be used with commands and will be used in feedback SMSes.

Desired Action	Code	Command	Ext. Cmd	Data
Name partition 1 "Main House"	1234	Partition	Name	1:Main House

Zones

This command is used to name zones or retrieve the status.

Desired Action	Code	Command	Ext. Cmd	Data
Name zone 1 as "Kitchen"	1234	Zone	Name	1:Kitchen
Name zone 2 "Lounge" & zone 5 "Patio"	1234	Zone	Name	2:Lounge, 5:Patio
Check zone status on P1	1234	Zone	Status	P1

Note: Zones on the SMS Duo v2 interface board are reported as zones 9 & 10 and must have 3k3 resistors as end of line supervision.

Normally open connections the 3k3 resistor must be in parallel

Normally closed connections must have the 3k3 resistor in series

Alarm Commands

Arm

The "Arm" command is sent to arm the Alarm Panel.

Note: The default setting in the IDS805 alarm panel is to stay arm if the entry/exit zone is not triggered which will cause the alarm to stay arm when receiving an arm command from an SMS. To change this please refer to location 13 in the IDS805 Installer manual.

Status – Returns the arm status of partitions

S1 to S2 – This arms the system into the stay profile specified, S1 = stay profile 1, S2 = stay profile 2.

Desired Action	Code	Command	Ext. Cmd	Data
Away arm P1	1234	Arm		P1
Away arm "House"	1234	Arm		House
Stay arm P1 in stay profile 1	1234	Arm	S1	P1
Stay arm House in stay profile 1 & Flat in stay profile 1	1234	Arm	S1	House
Check the arm status of the alarm	1234	Arm	Status	P1
Check the arm status of "House"	1234	Arm	Status	House

NOTE: If the alarm is away armed and a stay arm command is sent the message will be rejected. Away armed partitions must be disarmed before being stay armed.

Disarm

The "Disarm" command will be sent to disarm the Alarm Panel. The IDS805 only has one partition therefore "P1" must be entered.

Desired Action	Code	Command	Ext. Cmd	Data
Disarm	1234	Disarm		P1
Disarm "House"	1234	Disarm		House

Zones Bypassing

The "Bypass" command will be sent to bypass specific zones. You must specify which zones to bypass in the data field. Zones may be referred to by their number or, where applicable, by their name.

Valid Extended Commands:

Status – Returns the bypassed status of the zone(s).

Desired Action	Code	Command	Ext. Cmd	Data
Bypass zone 1	1234	Bypass		1
Bypass zone 3,4	1234	Bypass		3,4
Bypass named zone "Passage"	1234	Bypass		Passage
Bypass named zone "Lounge" & "Kitchen"	1234	Bypass		Lounge, Kitchen
Retrieve status of zones	1234	Zone	Status	P1

NOTE: Zones can only be bypassed if the alarm is unarmed

Zone Unbypassing

The Unbypass command is sent when a zone is bypassed and you want to reactivate it.

Desired Action	Code	Command	Ext. Cmd	Data
Unbypass Zone 5	1234	Unbypass		5
Unbypass "Kitchen"	1234	Unbypass		Kitchen

NOTE: Zones can only be unbypassed if the alarm is unarmed

PGM command controls the programmable outputs on the XSMS Duo v2 interface board labelled RLY1 and RLY2. These are relay outputs that are in the normally open state by default do not supply any voltage.

The PGM that is to be controlled must be specified in the data field and what action it must perform in the extended command field.

PGMs may be named with this command as well. As such, PGMs may be referred to by their number or their name.

Extended Commands:

On – Changes the relay from open to closed

Off – Changes the relay from closed to open

PulseH – Pulse High changes the output relay from open to closed for 3 seconds before returning it back to the open state

PulseL – Pulse Low changes the output relay from closed to open for 3 seconds before returning it back to the closed state

Status – Queries the state of the output

Name – Each output can be given a more meaningful name for easier control

Desired Action	Code	Command	Ext. Cmd	Data
Turn PGM 1 on	1234	PGM	On	1
Turn PGM 2 off	1234	PGM	Off	2
Pulse PGM 2 Low	1234	PGM	PulseL	2
Pulse PGM1 High	1234	PGM	PulseH	1
Name PGM 2 Lights	1234	PGM	Name	2:Lights
Get PGM 1 status	1234	PGM	Status	1

There is a new feature in the SMS Duo v2 that allows one to call the number of the SIM card in the SMS unit, and have it perform a specific customized command. Once the SMS Duo v2 unit has received a call and confirmed it is an authorised number it will disconnect the call, (Unauthorised numbers will not be disconnected).

Once an authorised number was detected the Xsms module will execute the command associated to the missed call function. No confirmation sms will be sent. If the command is not executed a sms will be sent to the cell number that initiated the missed call.

The following list of commands can be associated to the missed call function:

Desired Action	Code	Command	Ext. Cmd	Data
Enable a phone for miss call function	1234	Missedcall	Enable	Phone number
Enable user phone for miss call function	1234	Missedcall	Enable	Name (Name must exist in the Xsms unit)
Disable user from using the missed call function	1234	Missedcall	Disable	Phone number/Name
Pulse PGM 6 high	1234	Missedcall	Set	SMS string (1234 Pgm pulseh 6)
List all numbers enabled for missed call	1234	list		numbers

Note: SMSes will be not be sent for executed commands of missed calls, only If the command is not executed a sms will be sent to the cell number that initiated the missed call.

Hints help you with commands when you send an incorrect command structure, by returning information about the command you are trying to use.

Hints can be enabled/disabled by master users for all users and arming users can change their own hint statuses.

By default hints are turned on.

Desired Action	Code	Command	Ext. Cmd	Data
Enable hints	1234	Hint		On Name
Disable hints	1234	Hint		Off Name

Example:

Sending an incorrect stay profile number when trying to stay arm.

Hint switched OFF:

Sent: 1234 arm s5 p1

Receive: IDS SMS: "IDS SMS. Arm Failed. Invalid Stay Profile Selected."

Hint switched ON:

Sent: 1234 arm p1

Receive: IDS SMS: "IDS SMS Arm Failed. Invalid Stay Profile Selected. HINT: s1,s2,s3,s4 are valid stay profiles."

Master user can also switch hints for a user on or off by using the associated name that was linked to a phone number.

The help command will provide assistance with the syntax of the commands.

Desired Action	Code	Command	Ext. Cmd	Data
To list all commands available in help	1234	Help		
Help with arm command	1234	Help		Arm

Example:

♦ To get a list of all the commands you can receive help with:
Send: **1234 help**
Return message: **arm, disarm, partition status, name, bypass, unbypass, airtime, event, lockout, pgm, zone, report, add user, remove user, and list.**

♦ Ask for help with zone status:
Send: **1234 help zone**
Returned message: **Check zone status example: 1234 Zone Status p1**

GSM Module Status LEDs

See figure 1: X-SMS Module below for LED locations

GSM Connect Status

LED flashes once per second if not connected and once every three seconds when connected to the Cell network and the signal strength is good.

Heart Beat

LED Flashes when the unit is running and the power up sequence has completed. **Network Status**

LED Flashes when connected to the Cell provider's network and accepted by the service provider. I.E. Sim card is activated

Network Comms

LED on when communicating with the Cell network

I/O Module Panel Comms

LED on when communicating with the Interface board

Interface Board LED

Panel Comms LED (See Fig 1 to 3)

Slow flash – IDS805 not detected on power up and SMS Duo v2 in Stand Alone Mode

On – IDS805 detected and in IDS805 Mode

Off – IDS805 disconnected (Only shows if an IDS805 was connected and then disconnected.) To engage standalone mode power down then up.
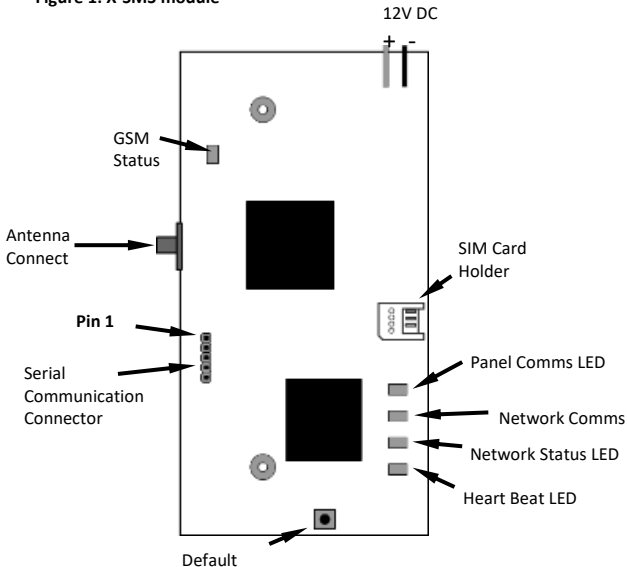
Diagrams

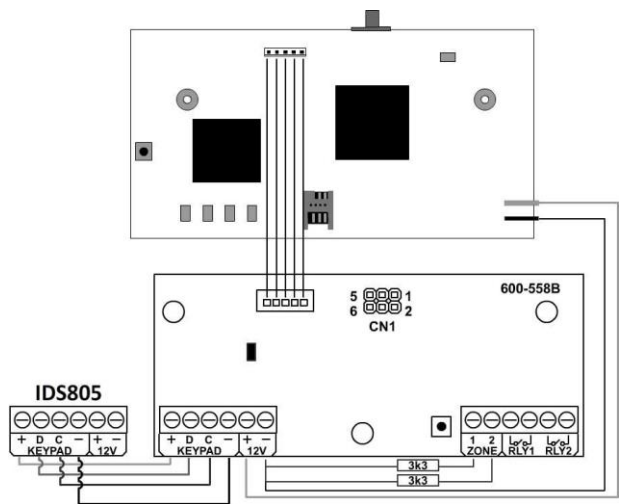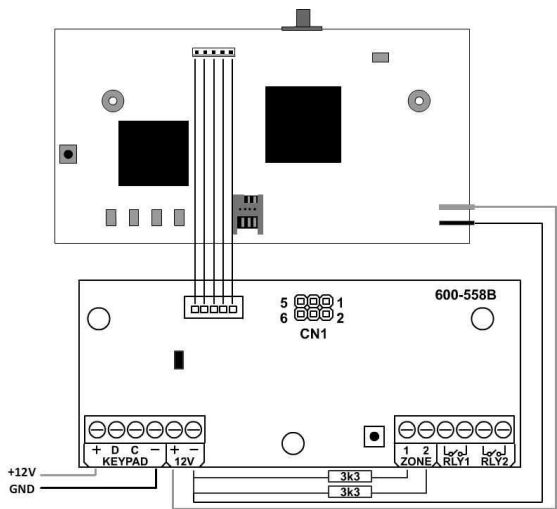**Figure 1: X-SMS module**

Figure 2: IDS SMS Duo v2 805 Connection

Figure 3: Standalone Wiring

Technical Data:

Xsms:

      Input Voltage: 12V DC
      Current: 39mA
      Transmit 78mA (2A peak)
      Operating Temperature: -10ºC, +50ºC

Integration Board:

      Input Voltage: 12V DC
      Current: 39mA
      Operating Temperature: -10ºC, +50ºC