INHEP DIGITAL SECURITY

IDS Analog Remote Receiver MKII

Installer Manual

South Africa's leading manufacturer and distributor of electronic security products

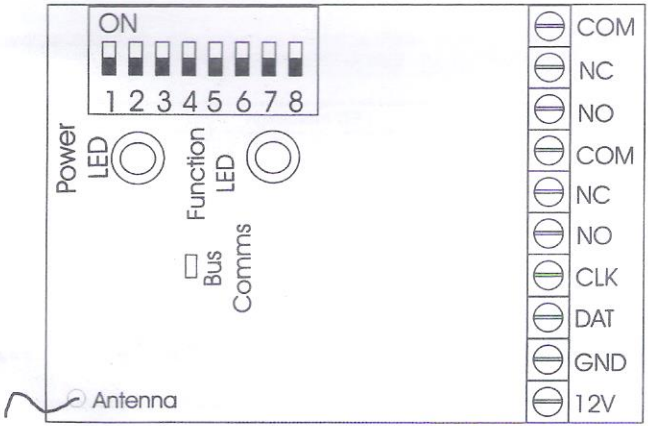
1. Overview

1.1 Introduction

The IDS Analog Remote Receiver MKII is a 433.92 MHz RF receiver that is designed to connect to an Alarm Panel. The receiver connects to the keypad bus (via CLK and DAT terminals), permitting the Alarm Panel to be armed and disarmed from remote transmitters. When remotes are learned, they are assigned to USER CODES stored in the IDS Alarm Panel. This means that the Alarm Panel is able to log ARM/DISARM events per user.

Functionality of the receiver is extended with two fully programmable relay outputs, which also makes this receiver useful for stand-alone applications (without Alarm Panels).

1.2 Wiring and Configuration



1.3 Features

- Up to 200 users in stand-alone mode.
- Up to 16 users in panel mode.
- Three LED's for communication.
- Support for bus-wired and stand-alone operation.
- Programmable via an 8-way DIP switch.

1.4 Electrical Specifications

Supply Voltage:	10 to 15 V_{DC}
Current Consumption:	30mA
Relay Rating Contacts:	1 A @ 30 V_{DC}
Minimum Receiver Sensitivity:	≤ -100 dBm
Receiver Frequency:	433.92 MHz

1.5 DIP Switches

There are no jumpers on this receiver, as the 6-pin dual in-line connector is used for version updates. All of the programming is performed via DIP switches (1 - 8). These are used for programming the functionality of the receiver, to learn remote buttons, change operating parameters, and to set the mode of operation. These instructions use the terms "SET" and "CLEAR" to refer to the position of the relevant DIP switches.

(Set = On, Clear = Off.)

During normal operation (STANDBY MODE) all switches are **cleared**, except the two that are used to select STANDBY MODE options - see page 8 "Selecting Standby Mode" for more details on these options.

1.6 LED Indication

There are three LEDs on the receiver PCB. A red, a green and an amber LED. Normally the red LED is on, and the green LED if off.

The amber LED is on when there is a satisfactory bus connection between the receiver and the Alarm Panel, otherwise, it pulses at a one second interval.

The green LED switches on momentarily when a "learnt" remote transmitter is received. The red LED switches off momentarily, and the green LED remains off, when an unknown remote transmitter is received.

The red and green LED's display a multitude of different signals to indicate receiver status. A full table of red and green LED indications is included on page 6.

2. Defaulting Procedure

When installing a remote receiver for the first time, it is necessary to default the unit first.

2.1 Clearing and Defaulting the Receiver

There are three "reset" functions. These enable you to erase all remote users, or restore the factory default settings for the relay parameters - or perform a **complete** clear and reset. The three options work as seen in points 2.2 – 2.4.

2.2 Erase All Learnt Users and Remote Transmitters

(All remotes are erased - Parameter settings are not changed)

Set DIP switches 2, 5, 6, 7, and then 8.
Clear DIP switch 8 to erase all the remotes.
Clear all remaining switches to return to standby mode.

2.3 Restore Factory Defaults without Erasing Remotes

Set DIP switches 1, 5, 6, 7, and then 8.
Clear 8 to affect the reset.
Clear all remaining switches to return to standby mode.

2.4 Erase Remotes and Restore Factory Default

This will restore the receiver to its "as-new" factory default condition. ALL remotes are erased.

Set DIP switch 1, 2, 5, 6, 7, and then 8.
Clear 8 to restore the factory defaults and erase all remotes.
Clear all remaining switches to return to standby mode.

NOTE:
The above clears all remote receivers, including remotes with ID's that have been assigned by the Alarm Panel.

3. Panel Mode for IDS805

3.1 Learning and Erasing Individual Users

NOTE 1:
DIP switch 3 must be **ON** to learn and erase users using the Alarm Panel keypad. When DIP switch 3 is **OFF** the receiver is protected against learning and erasing of remotes from the receiver unit.

NOTE 2:
It is important to note that if learning is disabled on the receiver, changing of a user code on the panel will NOT be stored on the receiver rendering the remote inoperable.

NOTE 3:
DIP switch 3 may be left ON, as the receiver automatically detects when the panel is in the learn new user code mode and it will only then enter the learning mode operation i.e. when the Alarm Panel is not in learn new user code mode the receiver will be in normal operation mode with only the RED LED on. When the Alarm Panel is then put into the mode to learn a new user code, the receiver will also enter learning mode and the GREEN LED will start flashing.

3.2 To Learn a New Remote (with DIP switch 3 ON)

1. Enter the learning mode on the Alarm Panel and enter a new user code as per normal.

2. After entering a new user code and pressing the "*" key; press a button on the remote to be learned. If the remote is not known to the system and it is the correct type of remote, the keypad will give a short beep. If the remote was already associated with a different user, the keypad will give an error beep sequence.

NOTE:
Please note that the receiver is only capable of learning 16 remotes when connected to the panel. Once all locations are filled, it will not be possible to learn any new remotes before some remotes are erased. If after adding a user, you do not wish to add a remote, press [#] key twice.
Button 1 default is Arm / Disarm.
Button 2 default is Stay Arm on the remote.

3.3 Erasing Individual Users (with DIP switch 3 ON)

1. Follow the normal procedure used to erase a user from the alarm system.
2. The receiver will automatically erase the selected user.

3.4 Arming and Disarming of the System

On arming or disarming of the system, there is always a 2 second delay before the remote will be allowed to arm or disarm the system again. If the 3 minute retrigger protect is activated, there will be a 2 second delay from disarming the system until the system may be armed again, but a 3 minute period from arming the system until it may be disarmed again.
When using a remote to arm or disarm, it is recommended that the siren toot on arm and disarm feature is used, and that the panel is set to always arm in the away mode.

3.5 The Panic Feature

When connected to a keypad bus, the remote receiver uses the bus to transmit remote events and panic signals on the panel.

4. Operational Mode (PANEL AND STAND-ALONE)

It is recommended that all re-assignments should be carried out before learning remotes.

4.1 Programming Quick Reference Table

NOTE:
Familiarise yourself fully with the relevant sections **before** programming the receiver. (This table is for quick reference purposes only, and does not show the full details.)

> IMPORTANT
> Before beginning any programming:
> Clear all DIP switches to ensure that they are set and reset in the correct logical sequence.

The following table shows the LED indication for each programming function selected:

FUNCTION	DIP SWITCH SETTING								LED STATUS	
	1	2	3	4	5	6	7	8	RED	GRN
Learn Relay Pulse Period	0	0	0	0	0	0	1	0	Fast	OFF
Relay Normal or Fail Safe	0	0	0	0	0	1	0	0	Slow	Fast
Assign Panic Relay	0	0	0	0	0	1	1	0	Slow	OFF
Enable Relay Retrigger Protection	0	0	0	0	1	0	1	0	Fast	ON
Relay Pulse/Toggle	0	0	0	0	1	1	1	0	Fast	Fast
Assign Button to Relay	0	0	0	0	1	0	0	0	Slow	ON
Assign Panic Button	0	0	0	1	0	0	0	0	OFF	Fast
Assign Arm/Disarm Button	0	0	1	0	0	0	0	0	OFF	Fast
Assign Stay Arm Button	0	1	0	0	0	0	0	0	OFF	Fast
Factory Default	1	0	0	0	1	1	1	0	Fast	Fast
Erase All Users	0	1	0	0	1	1	1	0	Slow	Slow
Erase Offline Users	1	0	0	0	0	0	0	0	On	Pulse

Factory Defaults

Both relays set to pulse for 3 seconds.
No retrigger protection.
No panic button enabled.
Relay 1 for button 1.
Relay 2 for button 3.
Button 1 for – ARM / DISARM.
Button 3 for Stay ARM.
Relay 2 for Panic when enabled.