

# HomeSeer®

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## **ADIO-100 System Interface**

**Analog Input  
Digital Input-Output**

## **Introduction**

Welcome to the HomeSeer Technologies **ADIO-100** Analog/Digital System Interface. This unit is designed to connect to virtually any HomeSeer system\* and will work with many available digital and analog devices including sensors, LEDS, sounders and contact closure controlled devices.

\*Includes any HomeSeer system that supports the standard HomeSeer plug-in API.

## **Possible Uses**

**Analog Input**—Use with a variety of analog sensors to monitor light levels, temperature, humidity, energy, sound and other analog data. Events may be triggered on the changing values of these sensor devices.

**Digital Input**—Use with door or window contact switches to monitor status of doors or windows. Use in parallel with an existing security panel to monitor the status of security peripherals, such as motion sensors. Events may be triggered on the changing status of these devices.

**Digital Output**—Use with HomeSeer events to power LEDs, piezo buzzers or sirens or other low voltage, low current devices based on the changing status or value of anything in your system.

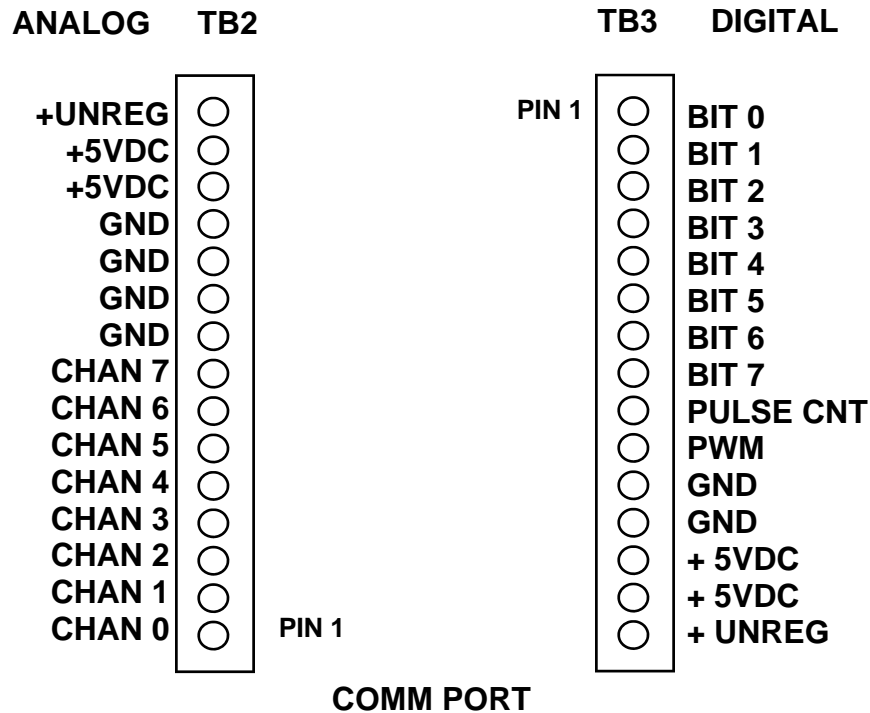
## **Installation**

**Hardware**—The ADIO-100 includes an RS232 serial interface with a DB9 connector (standard COM port connection). If no serial port is available, the ADIO-100 may be used with a serial converter box or cable. Contact HomeSeer directly or visit the HomeSeer online store (<http://store.homeseer.com>) for recommended converter options.

**Software**—The ADIO-100 will work with any HomeSeer once you install the ADIO-100 software plug-in. The plug-in may be downloaded and installed via the HomeSeer system built-in updater.

1. Download the ADIO-100 plug-in from the updater
2. Restart Your HomeSeer System to complete installation
3. Navigate to Setup>Interfaces page of your HomeSeer system and “enable” the plug-in and click “Save”
4. Restart HomeSeer and check the log for any errors.

## TERMINAL STRIP PINOUTS



### LED Operation

Blinking Green	[1 per Second]	Unit functioning correctly - idle
Blinking Green	[Rapid or Steady]	Unit receiving serial data
Blinking Red	[Rapid or Steady]	Unit transmitting serial data
No LED		Unit is not functioning

### Power Supply

7.5-15.0 Vdc approx. 50 ma. nominal power, 24 VDC maximum 100 ma current draw (we suggest our PS9J a 9VDC 400 ma unregulated power supply)

### GND and Shield

The GND and Shield terminals are connected on the **ADIO-100** board and are therefore electrically equivalent.

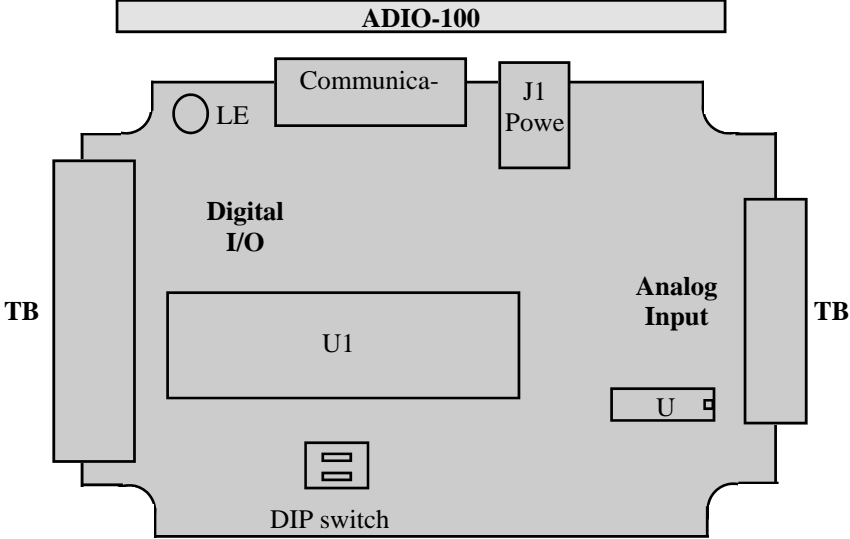
### RS-232 Cabling

The RS-232 interface uses a "**3 wire**" RS-232 connection. That is to say only three wires are connected between the I/O Module and the Host PC: **TxD**, **RxD** and **GND**.

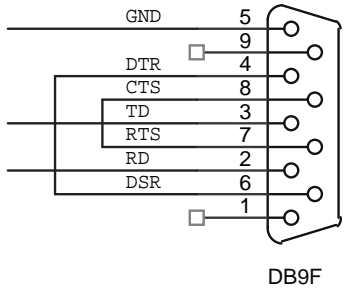
### RS-232 Flow Control

The HomeSeer Technologies modules **do not support hardware or Xon/Xoff flow control**.

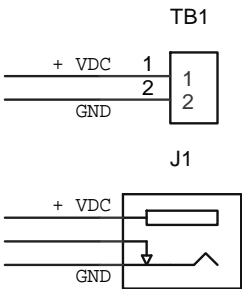
# Internal Layout and DIP Switch Settings



**COMMUNICATION PORT**



**POWER CONNECTIONS**



Power 2.5mm

Baud Rate Switch Settings		
SW1	SW2	Baud Rate
OFF	OFF	9600 baud
ON	OFF	19200 baud
OFF	ON	57600 baud
ON	ON	115200 baud

## **ADIO-100 Specifications**

MPU:	Microchip PIC18F4455
MPU Clock:	32 Mhz
Interface:	RS-232 (single ended)
Baud:	9600, 19200, 57600, 115200 (DIP switch selectable)
LED:	Bicolor diagnostic LED
Watchdog:	MPU has built-in watchdog timer
POR:	MPU contains timed Power On Reset circuitry
Brownout:	MPU brownout detection circuitry built-in
Temperature:	0° to 70°C (32° to 158°F) <i>Commercial Temperature Range</i>
PCB:	R4
Power:	7.5Vdc to 15.0 Vdc (approx. 50 ma nominal current) 24 VDC maximum 100 ma current draw.

### **WARRANTY**

**HomeSeer Technologies** warrants this product against defective workmanship and components for one year from the date of purchase. HomeSeer Technologies agrees to repair or replace, at its sole discretion, a defective product if returned to HomeSeer Technologies with proof of purchase. Products that have been mis-used, improperly applied, or subject to adverse operating conditions fall beyond the realm of defective workmanship and are not covered by this warranty.

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