

# IQ-PSI Pocket Serial Interface

## OVERVIEW

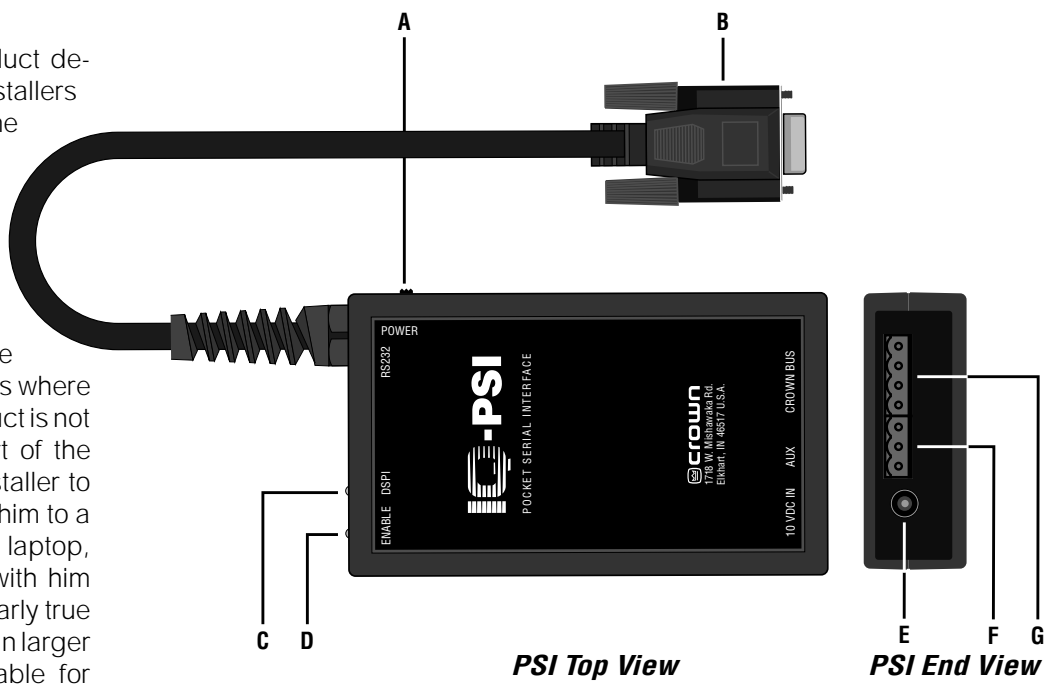
The pocket interface is a product designed as a tool for use by installers and servicers of IQ Systems. The PSI is a physically small interface between RS232 to a computer and one Crown Bus serial data loop.

## APPLICATIONS

Applications for the product are primarily for setup of IQ Systems where an INT II or other interface product is not meant to be a permanent part of the system. This tool allows the installer to bring the pocket interface with him to a site, program the system with a laptop, then take his laptop and PSI with him when he leaves. This is particularly true for relatively small installations. In larger systems the PSI is very valuable for mobility, particularly when checking parts of a system that may be located remotely.

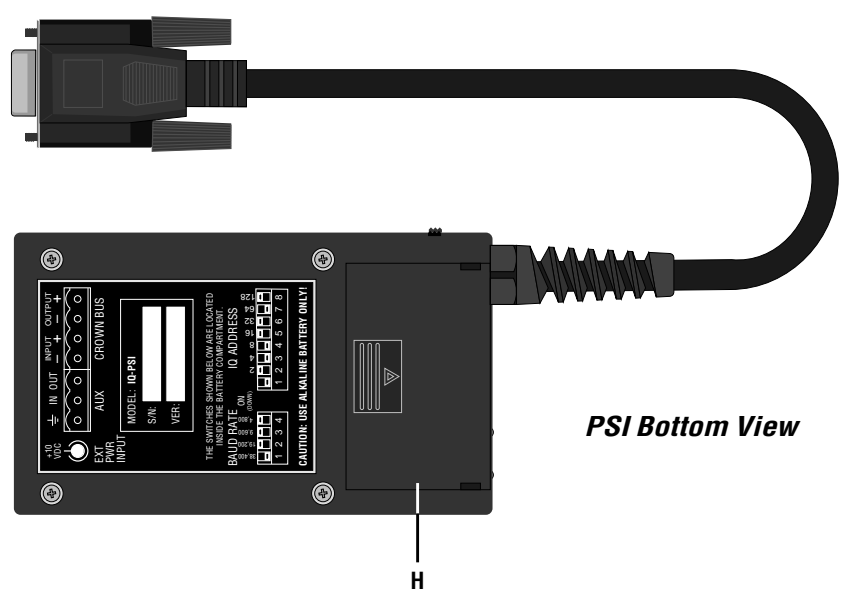
## HARDWARE

- The PSI is about the size of your hand.
- It has a black finish.

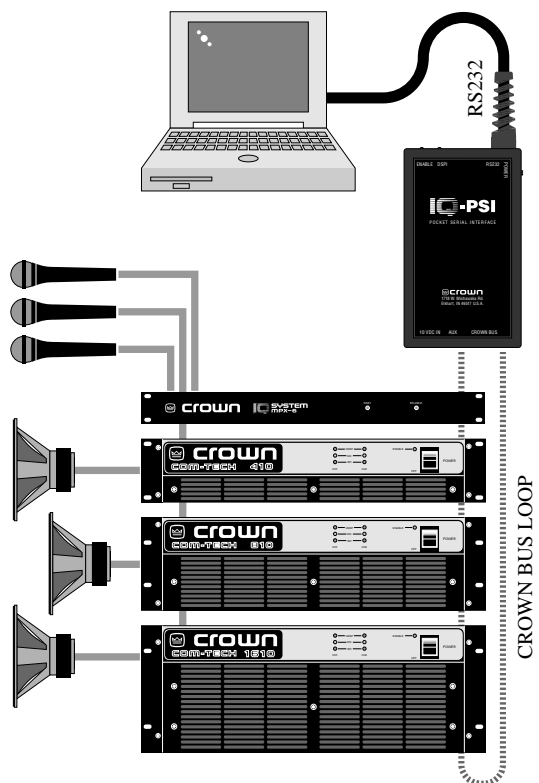


**PSI Top View**

**PSI End View**



**PSI Bottom View**



**PSI Example Application**

- Power switch (A). It connects or disconnects power from the battery or AC source. Any time the PSI is off or loses power drop-out relays bypass the Crown Bus connection to the unit.
- Attached RS232 cable (B) with female DB9 serial connector. The PSI automatically senses the presence of a PC at its RS232 connector. If there is no PC present the unit closes its loop to operate as a component. When an RS232 connection is sensed it opens the loop to serve as interface.
- Data LED (C). It lights to indicate reception of data being addressed to the unit.
- Enable LED (D). It indicates AC or battery power is available and that the unit is switched on.
- +10 VDC input (E) for a standard AC adaptor.
- Aux port (F). It has a three pin removable barrier block connector. Most IQ components have such a port to pro-

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vide a control voltage for external use as well as an entry point for a control voltage into the system.

- Crown Bus loop connector (G). It uses a four pin removable barrier block.

**SETUP**

To access the battery compartment and setup switches slide the battery cover off the back panel. Before inserting a battery configure the baud and address switches as necessary. Note that no two PSI units on the same loop may have the same loop address, valid addresses range from 1 to 250. Baud may be set for 38,400, 19,200, 9,600, or 4,800.

SWITCHES				
BAUD	1	2	3	4
38,400	ON	OFF	OFF	OFF
19,200	OFF	ON	OFF	OFF
9,600	OFF	OFF	ON	OFF
4,800	OFF	OFF	OFF	ON

**Baud Rate Selection**

**IQ<sup>2</sup> SUPPORT**

The IQ-PSI is an IQ<sup>2</sup> component and, as an interface, it supports both IQ<sup>2</sup> and legacy protocol.

**SPECIFICATIONS**

**Internal Controls** — One 8-segment DIP switch to set the address, one 4-segment DIP switch to set RS232 baud rate.

**External Controls** — Power on-off.

**Connectors** — One 4-pin “Euro-style” removable barrier block Crown Bus connector, one 3-pin “Euro-style” removable barrier block aux port connector, one female 9-pin RS232 connector on attached cable, one male coaxial +10VDC external power input jack.

**Indicators** — Green Enable LED shows unit is powered and switched on and a yellow Data LED that indicates data transmitted to/from the unit or may be forced on via software.

**Power** — Standard 9 VDC battery or external 10 VDC supply.

**Finish** — Molded black high-impact styrene.

**Crown Bus Isolation** — Data is optically coupled to 20 mA current loop.

**Data Rate** — 38.4K baud on Crown Bus loops; 4.8 to 38.4K baud to computer.

**Data Format** — Serial, binary, asynchronous, 1 start bit, 1 stop bit, 8 data bits, no parity.

**Crown Bus Interface Type** — Isolated 20 mA current loop.

**PC Interface Type** — RS232.

**Operation** — Half duplex.

**Crown Bus Transmission Distance** — 300 to 3000 feet (90 to 900 m), depending on wire type, size, and capacitance. Typically 1000 feet (300 m) with shielded twisted pair 26AWG or larger; extendable via IQ Repeater.

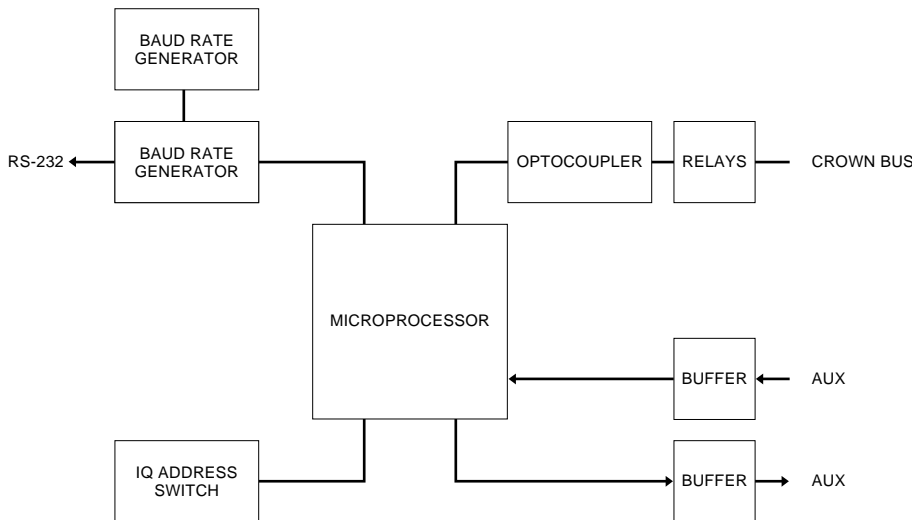
**Transmission Distance RS232** — 50 feet (15 m).

**Guaranteed Excellence**



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**PSI Basic Block Diagram**