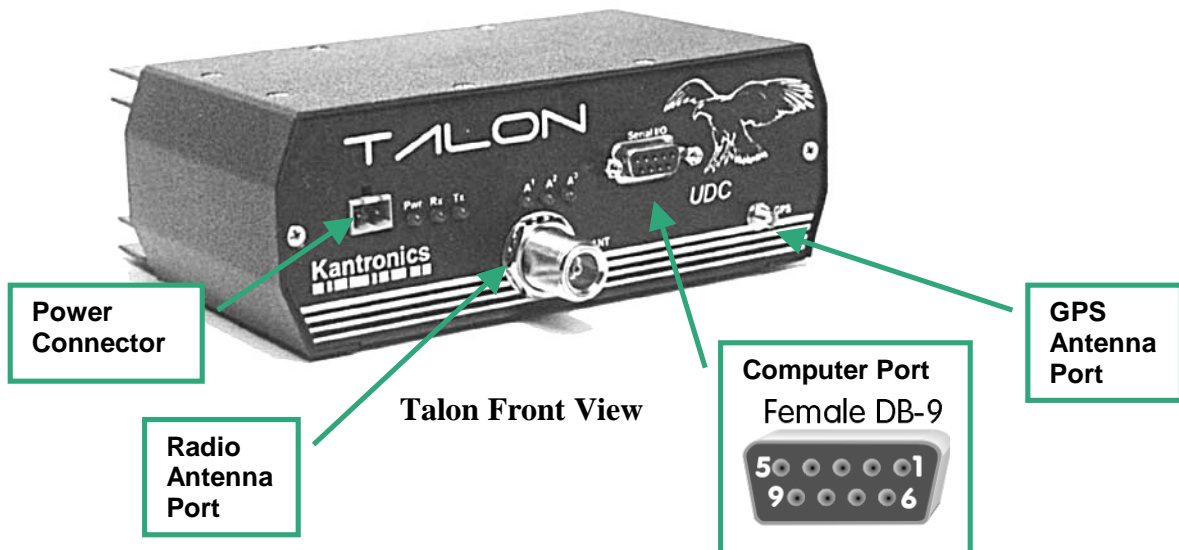


## Kantronics Talon Port Pinout Information



### Power Connector (2-pin COMBICON, male):

(mating 2 pin female connector is supplied with unit)

| Terminal Number | Physical Position | Description                |
|-----------------|-------------------|----------------------------|
| 1               | Left terminal     | Positive dc supply voltage |
| 2               | Right terminal    | GND (dc return)            |

### Radio Antenna Port:

Type "N" RF connector. Locate antenna radiators at least 2 feet from radio to prevent RFI. Customer is responsible for observing FCC human RF exposure safety limits.

### GPS Antenna Port:

MPX connector mates with the GPS magnet mount antenna, which is supplied with the unit if the unit is ordered with the GPS option.



## Kantronics Talon Port Pinout Information

### Computer (serial) Port:

| Terminal no. | Signal name    | Function  |
|--------------|----------------|---|
| 1            | DCD            | Data Carrier Detect. Signals the status of the current I/O stream to your computer. If you are connected to another packet station on the current I/O stream, this output will have a positive voltage on it. If you are disconnected, the voltage on this output will be negative. |
| 2            | RXD            | Receive Data: Carries data from the Talon to a computer or other serial device.   |
| 3            | TXD            | Transmit Data: Carries data from a computer or other serial device to the Talon.  |
| 4            | DTR            | Data Terminal Ready. Indicates when the computer or other serial device's port is active.   |
| 5            | Digital Ground | Digital Signal Ground. Common reference line for digital signals.   |
| 6            | DSR            | Data Set Ready. Indicates the Talon is powered up.  |
| 7            | RTS            | Request to Send. Tells the Talon when the computer or other serial device is ready to accept more input from the Talon. Used for hardware flow control.   |
| 8            | CTS            | Clear to Send. Indicates whether the Talon is ready to accept more input from the computer. Used for hardware flow control.   |
| 9            | RI             | Output from the Talon. Currently not used.  |

#### Notes:

All cables must be well shielded.

## Additional Connectors on Talons with Optional I/O Board:



### Analog / Digital I/O Port Pinout (spring-release connector)

|     |     |      |     |     |      |     |     |      |     |     |     |     |     |     |            |
|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|-----|-----|-----|-----|------------|
| AI1 | AI3 | DGND | AI5 | AI7 | DGND | DI4 | DI2 | DGND | DO4 | DO2 | GND | AO1 | AO3 | GND | Function   |
| 1   | 3   | 5    | 7   | 9   | 11   | 13  | 15  | 17   | 19  | 21  | 23  | 25  | 27  | 29  | Terminal # |
| 2   | 4   | 6    | 8   | 10  | 12   | 14  | 16  | 18   | 20  | 22  | 24  | 26  | 28  | 30  | Terminal # |
| AI2 | AI4 | DGND | AI6 | AI8 | DGND | DI3 | DI1 | DGND | DO3 | DO1 | GND | AO2 | AO4 | GND | Function   |

| Signal Name | Signal Terminal #    | Use Ground Terminal # | Description   |   |
|-------------|----------------------|-----------------------|---|---|
| AI1         | 1                    | 5                     | Analog Input 1, 0 to 5 V dc                           | <p>Analog inputs may be jumpered internally (249 Ω resistor) for two-wire or three-wire 0 to 20 mA range input.</p> <p>Note: Because of protection op-amps, which are rail-to-rail input and output devices, the voltage to the μP internal 10 bit A/D converter is limited to 4.950 V.</p> |
| AI2         | 2                    | 6                     | Analog Input 2, 0 to 5 V dc                           |   |
| AI3         | 3                    | 5                     | Analog Input 3, 0 to 5 V dc                           |   |
| AI4         | 4                    | 6                     | Analog Input 4, 0 to 5 V dc                           |   |
| AI5         | 7                    | 11                    | Analog Input 5, 0 to 5 V dc                           |   |
| AI6         | 8                    | 12                    | Analog Input 6, 0 to 5 V dc                           |   |
| AI7         | 9                    | 11                    | Analog Input 7, 0 to 5 V dc                           |   |
| AI8         | 10                   | 12                    | Analog Input 8, 0 to 5 V dc                           |   |
| AO1         | 25                   | 29                    | Analog Output 1, 0 to 4.995 V dc @ minimum 10 kΩ load | <p>Discrete inputs are pulled up internally to logic high of 5 V dc. These inputs may be activated (pulled low) with a relay contact, open collector BJT, or open drain FET.</p>  |
| AO2         | 26                   | 30                    | Analog Output 2, 0 to 4.995 V dc @ minimum 10 kΩ load |   |
| AO3         | 27                   | 29                    | Analog Output 3, 0 to 4.995 V dc @ minimum 10 kΩ load |   |
| AO4         | 28                   | 30                    | Analog Output 4, 0 to 4.995 V dc @ minimum 10 kΩ load |   |
| DGND        | 5, 6, 11, 12, 17, 18 |                       | Digital ground of PCB (μP)                            | <p>Discrete outputs can handle up to +50 V dc and 115 mA dc (open drain MOSFET)</p>   |
| DI1         | 16                   | 18                    | Discrete Input 1                                      |   |
| DI2         | 15                   | 17                    | Discrete Input 2                                      |   |
| DI3         | 14                   | 18                    | Discrete Input 3                                      |   |
| DI4         | 13                   | 17                    | Discrete Input 4                                      |   |
| DO1         | 22                   | 24                    | Discrete Output 1                                     |   |
| DO2         | 21                   | 23                    | Discrete Output 2                                     |   |
| DO3         | 20                   | 24                    | Discrete Output 3                                     |   |
| DO4         | 19                   | 23                    | Discrete Output 4                                     |   |
| GND         | 23, 24, 29, 30       |                       | Chassis ground (PCB equivalent)                       |   |



## Kantronics Talon Port Pinout Information

### Auxiliary Serial Port (female DB-9)

| Terminal no. | Signal name    | Function  |
|--------------|----------------|---|
| 1            | DCD            | Output from Talon   |
| 2            | RXD            | Receive Data: Carries data from the Talon to another serial device.   |
| 3            | TXD            | Transmit Data: Carries data from another serial device to the Talon.  |
| 4            | DTR            | Data Terminal Ready. Indicates when the other serial device's port is active.   |
| 5            | Digital Ground | Digital Signal Ground. Common reference line for digital signals.   |
| 6            | DSR            | Data Set Ready. Indicates the Talon is powered up.  |
| 7            | RTS            | Request to Send. Tells the Talon when the other serial device is ready to accept more input from the Talon. Used for hardware flow control. |
| 8            | CTS            | Clear to Send. Indicates whether the Talon is ready to accept more input from the other serial device. Used for hardware flow control.      |
| 9            | RI             | Output from the Talon. Currently not used.  |

**Note:** This auxiliary serial port on the optional I/O board cannot be used concurrently with the optional internal GPS module.