

## SDR-CF and SDR-OEM-CF J4 Control Port

### API Port (J4)

Contact	Function	Direction	Wire Color
1	V <sub>DD</sub> (5 VDC)		-
2	GND (0 VDC)		Black
3	<u>REC_BUTTON</u>	input	Blue
4	<u>REC_TOGGLE</u>	input	Grey
5	<u>FAULT</u>	output	Yellow
6	no connect		-
7	<u>DATA</u>	output	Orange
8	<u>RECORD</u>	output	Green
9	V <sub>DD</sub> (5 VDC)		-
10	GND (0 VDC)		-

J4 Socket (shell): Hirose DF11-10DS-2C (Digi-Key part number H2023-ND)

For use with DF11 crimp contacts e.g. DF11-2428SCA (Digi-Key part number H2300-ND) or pre-crimped wires (Digi-Key part number H3BXG-101LL-CW where LL=length in inches, C=color code, W=wire gauge).

### API Port Functions

Function	Description
V <sub>DD</sub> (5 VDC)	Regulated low-current voltage output. Use for deasserting active-low inputs and driving LED indicator outputs.
GND (0 VDC)	Signal ground. Use for asserting active-low inputs.
<u>REC_BUTTON</u>	Momentary record input. Function is similar to front-panel record button. To use, connect a momentary pushbutton switch between this contact and GND.
<u>REC_TOGGLE</u>	Force-record input. To use, connect a toggle switch between this contact and GND. When closed, the SDR will always enter record mode. Available in firmware rev. 8.3 and higher.
<u>FAULT</u>	Fault condition indicator output. Function is similar to the front-panel Fault indicator. When low, indicates an unrecoverable error has occurred in the SDR. To use, connect an LED's cathode to this contact and its anode to V <sub>DD</sub> via a current-limiting resistor. Limit current to 30 mA max.
<u>DATA</u>	Data indicator output. Function is similar to the front-panel Data indicator. Pulses momentarily low to indicate data reception in the SDR. To use, connect an LED's cathode to this contact and its anode to V <sub>DD</sub> via a current-limiting resistor. Limit current to 30 mA max.
<u>RECORD</u>	Recording indicator output. Function is similar to the front-panel Record indicator. Driven low when the SDR is recording data to an open file. To use, connect an LED's cathode to this contact and its anode to V <sub>DD</sub> via a current-limiting resistor. Limit current to 30 mA max.

Logic Levels: 5.0 VDC CMOS (inputs are connected to 5 VDC via 100kΩ pullup resistors)

Note: Do not use the REC\_BUTTON and REC\_TOGGLE functions simultaneously.