



SSR-SDU Differences From the SSR-1U

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The SSR-SDU is derived from the SSR-1U and has the same capabilities, functionality, and specifications as documented in the SSR-1U User's Manual with the following exceptions:

- The SSR-SDU uses a full-size SD card instead of the microSD card used on the SSR-1U.
- The SSR-SDU replaces the SSR-1U Aux connector with a USB-C connector for USB access and a separate 4 pin, 0.100" pitch connector for Channel 4 serial. Power can be applied to the board from both the USB connector and/or the Channel 4 serial connector. The channel 4 connector specifications are:
Connector: Molex 171974-0004
pinout – 1: +V(4.5-16VDC), 2: GND, 3: Ch4-Tx, 4: Ch4-Rx
Mate: (non-latching) Molex 0050579204, or (latching) Molex 0050579404
Crimp pins: Molex 0016021116 or Molex 0016020096
- The SSR-SDU adds a new channel function, RecShell, which combines the Record and Shell channel functions. A RecShell channel will normally operate in Record mode. However, upon external hardware trigger, the serial channel will be connected to the shell instead of the record subsystem. The default external trigger is the presence of power at the Channel 4 connector. Alternatively, pin 19 on the main interface connector can be assigned as the shell activation trigger using the shell command *config p19 shell*. Pulling pin 19 low forces the RecShell channel to Shell mode. Releasing pin 19 allows the channel to return to record mode. Note that a recording in progress is not terminated by triggering shell on a RecShell channel. Rather, all comm with the channel is routed to the shell instead of the record subsystem until the trigger is released.
As with the SSR-1U, only one channel may be assigned to the User Interface Module (Shell, RecShell, or Control). A RecShell channel in Shell mode is indicated (on channels 1-3) by the green LED being solid ON for one second every other second. Otherwise, the green LED indicates receive activity as per usual.