Manuals+ — User Manuals Simplified.

FreeSpeak II Antenna Splitter Owner's Manual

Contents

FreeSpeak II Antenna Splitter

Specifications

- Product Name: FreeSpeak II Transceiver/Antenna Splitter
- Compatibility: FSBP (FreeSpeak I) and FSII-BP (FreeSpeak II, 1.9 & 2.4) systems

- Power Supply: Universal power supply (local power required)
- Connectors: DC IN power connector, Fiber Module connector, RJ45 connectors
- LED Indicators: Antenna Connection LEDs, Base Connection LEDs, Power LED

Product Usage Instructions

- You can mount the splitter on a flat surface, microphone stand, or RK-100 1RU rack mount shelf using the provided screw points or stand connectors.
- Connect the splitter to the power using the DC IN power connector.
- Use fiber linking for connection to a Base Station or another FSII-SPL unit.
- Use EtherCON RJ-45 connectors for the Base Station or matrix connection.
- Access the DIP switches by removing the covering panel on the base of the splitter.
- Make necessary settings for mode of operation, local DECT synchronization, and firmware update.
- Remember to repower the unit after changing a DIP switch setting for it to take effect.

INTRODCTION

Transceiver/antenna splitter

- The FSII-SPL transceiver/antenna splitter is a device that connects multiple transceivers/antennas to an Eclipse® HX matrix (E-IPA-HX or E-Que-HX card), FreeSpeak II® Base Station or Arcadia® Central Station.
- The splitter features an RJ-45 connector that connects the base station or Eclipse matrix card to the splitter and five antenna RJ-45 connectors to connect up to five antennas.
- The splitter must be locally powered using the supplied external in-line universal power supply.
- In addition, the FSII SPL provides fiber linking to an FSII-Base-II Base Station, Arcadia Central Station, or another FSII-SPL unit. There are eight DIP switches to select the mode of operation.
- You can mount the splitter on a flat surface or on a microphone stand using the screw points or stand connectors.
- Additionally (1) FSII-SPL splitter can be mounted on the RK-100 1RU rack mount shelf using (4) 4-40 screws (not included).
- The FSII-SPL is compatible with both FSBP (FreeSpeak I) and FSII-BP (FreeSpeak II, 1.9 & 2.4) systems.

FSII-SPL front connector panel

FSII-SPL Front Connector Panel
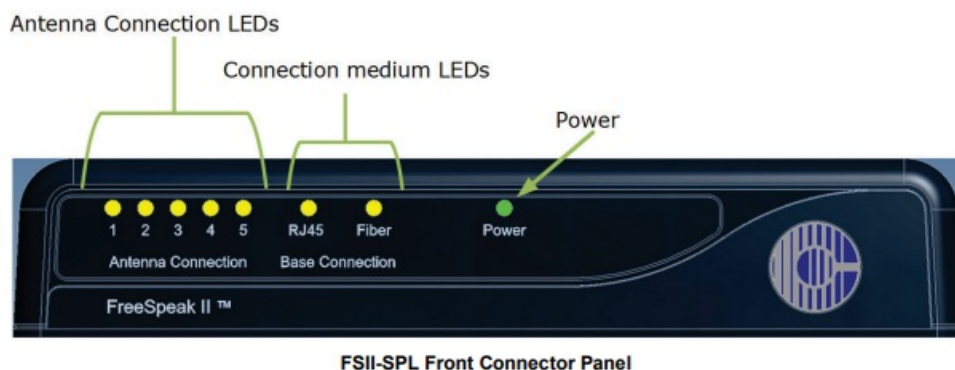
Antenna Connection LEDs

- These yellow LEDs indicate that the splitter is receiving data from the antennas.

Base Connection LEDs

Connection to Base; RJ45 or fiber.

- If the LEDs are steady on, DECT synchronization is being received from the Base Station/matrix.
- If the LEDs display a double flash, DECT synchronization is occurring locally.
- If the LEDs display a rapid pulse flash, there is no DECT synchronization (fault condition).

Power LED
This green LED indicates that the splitter is receiving power.

FSII SPL rear panel

FSII-SPL Rear Connector Panel
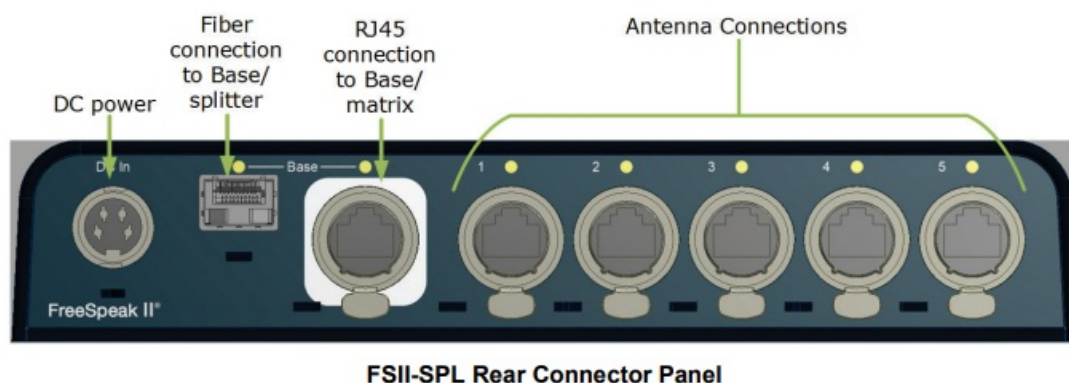
DC IN power connector

- This connector is used to locally power the splitter with the supplied universal power supply. The use of local power is required.

Fiber connection to Base Station or another FSII-SPL unit

- This connector uses a Fiber Module (multi-mode: SFP-MMFO-100M-FX or HLI-MMFO – single-mode: SFP-SMFO-100M-LX or HLI-SMFO).

RJ45 connection to Base Station or matrix

- One EtherCON RJ-45 connector

Antenna connectors

- Five EtherCON RJ-45 connectors

Connecting and using a splitter

- Connect the FSII-SPL base connector to Eclipse E-IPA-HX (SFP connection) or E-Que (RJ45 connection) matrix cards or FreeSpeak II Base Station or Arcadia Central Station transceiver port (can be RJ45 or fiber).

- Connect all antennas (up to 5) to splitter antenna ports. Also, make sure that both the power LED (green for 1.9 GHz, blue for 2.4 GHz) and the yellow transceivers data LED are lit on each transceiver. If all are lit, then the connection has been successfully made, and the transceivers will be active and support belt packs. If the transceiver antennas are not lit, check the connections.
- Note: For 24 AWG Cable: distances under 100m (328 feet), antennas can be powered by the splitter. Above 100m, they must have direct/local power.
- For 26 AWG Cable: distances under 50m (164 feet), antennas can be powered by the splitter. Above 50m, they must have direct/local power.
- Make any necessary DIP switch settings (mode of operation, local DECT synchronization, firmware update).

DIP switch settings (default in BOLD)

DIP switch settings (default in **BOLD)**	
1 to 5	Antenna ports 1 to 5 **ON** – Active OFF - Convert to Fiber
6	**ON** – Base Sync OFF – Local Sync
7	If 6 is switched to OFF **ON** – FreeSpeak II OFF – FreeSpeak I
8	ON – Update **OFF** – Normal operation

To access the DIP switches, remove the covering panel on the base of the splitter (two screws).
Note: When you change a DIP switch setting, you must re-power the unit for the change to have any effect.

Typical FSII-Base/FSII-splitter configurations using Clear-Com equipment
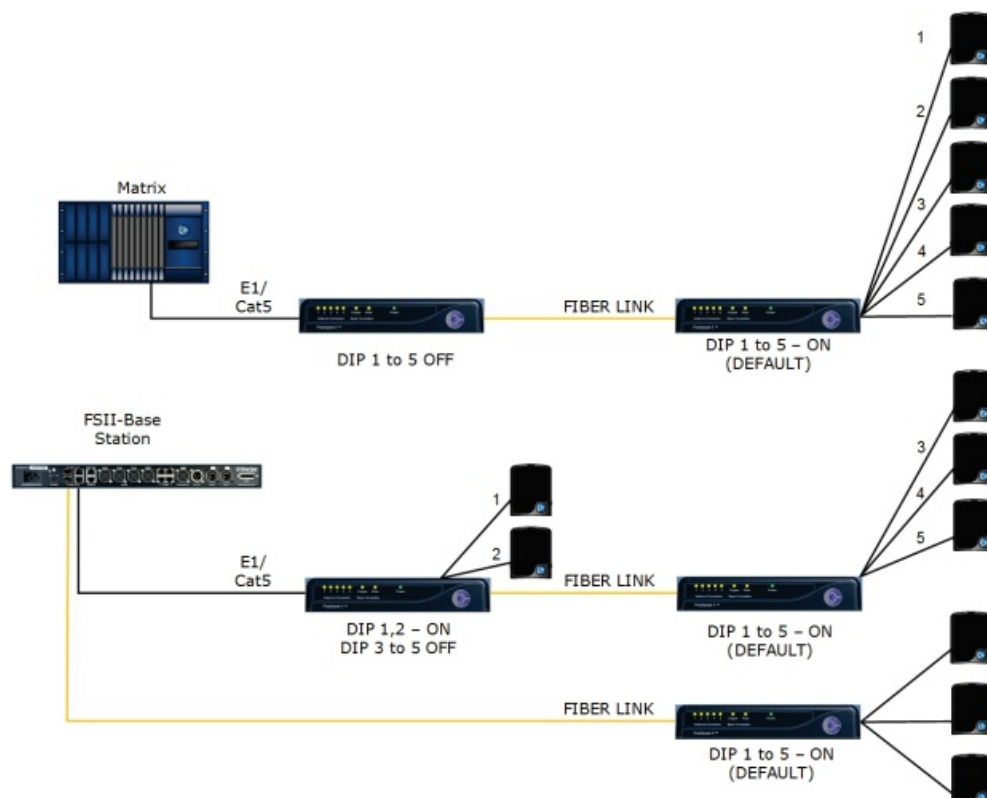
Note: Splitter daisy-chaining is not available when using E1 with an E-IPA card

Typical system configuration using third-party equipment
Note: In this configuration, there is no DECT Synchronization from the Base Station or matrix (DIP 6 – OFF). Only local DECT synchronization is possible.
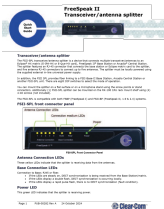
FAQ

- **Q:** Can I daisy-chain splitters when using E1 with an E-IPA card?
- **A:** No, splitter daisy-chaining is not available when using E1 with an E-IPA card.

Documents / Resources

FreeSpeak FreeSpeak II Antenna Splitter [pdf] Owner's Manual
FreeSpeak II Antenna Splitter, FreeSpeak II, Antenna Splitter, Splitter

References

- **User Manual**