

Super Fencing System

SFS-Link-FPA Manual

V1.0

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About

The SFS-Link-FPA adapter retransmits RS422-FPA protocol scoring machine data over Bluetooth.

Instructions

1. Plug SFS-Link-FPA D-Sub 9-pin plug into scoring machine D-Sub 9-pin socket.
2. Power SFS-Link-FPA with USB-C cable.
3. SFS-Link-FPA will now be discoverable by Super Fencing System.

Microcontroller LED Functions

“D4” LED: **FLASHES** when scoring machine data is **NOT** detected.
 SOLID when scoring machine data **IS** detected.

“D5” LED: **OFF** when SFS-Link-FPA is **NOT** connected to Super Fencing System.
 ON when SFS-Link-FPA **IS** connected to Super Fencing System.

PCB Components

Serial Converter: Common RS485<->3.3V TTL module

D-Sub Plug: Amphenol ICC (FCI) D09P33E4GL00LF

Microcontroller: ESP32 C3*

*AirM2M_CORE_ESP32C3 in Arduino IDE

PCB contains lead-free HASL.

Lead-free solder used for soldering PCB components.

SFS-Link-FPA Bluetooth Protocol V1.0

Bluetooth (BLE) Device Name: “SFS-Link-FPA [S/N]“

Service & Characteristic UUID: "6F000000-B5A3-F393-E0A9-E50E24DCCA9E"

Characteristic is initialized to “NODATA”.

Characteristic is set to “NODATA” when no RS422-FPA data is read for over 1.5 seconds.

Characteristic has read and notify properties.

Characteristic is RS422-FPA serial message.