

## F-COLOR Single Cradle

The F-COLOR Single Cradle is a battery charger and also functions as a serial communication interface between the host computer (RS232) and the RS232 contacts on the Formula Color™ terminal.

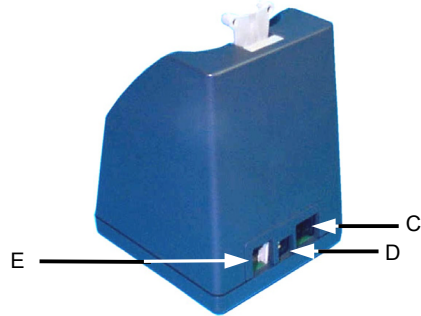
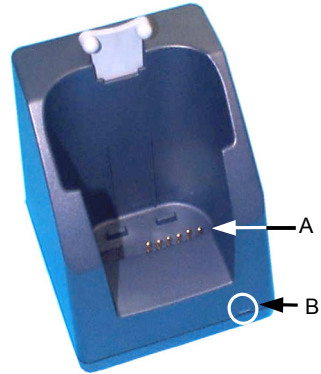


Figure 1 – F-COLOR Single Cradle General View

Key:

- A) Battery recharge and RS232 contacts
- B) Power indicator LED
- C) Connector for host computer connection (RS232)
- D) Power supply connector
- E) Modem connector (F-COLOR modem cradle only)

By launching the communication software from the Formula Color™ terminal and then inserting the terminal into one of the cradle slots, data can be transmitted to the Host. By inserting the terminal into the cradle, the terminal battery charging starts.

### Correct Terminal Insertion / Removal

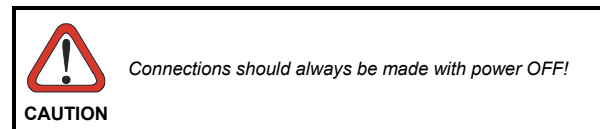
For correct terminal insertion onto the cradle, insert the terminal from the top of the cradle and push the terminal down until the clip of the cradle clicks.



Figure 2 - Terminal Insertion

To remove the terminal from the F-COLOR cradle, simply pull it upwards while holding the cradle firmly down.

## CONNECTIONS



F-COLOR single cradle can be connected to a Host by means of an RS232 interface.

Each connection requires a power supply to be connected to the cradle. We recommend the DL FPS18 power supply.

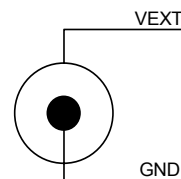


Figure 3 - Power Supply Polarity

## RS232 CONNECTION

The F-COLOR single cradle can be connected to the Host by means of cable 94A054000 for 9-pin connections or to cable 94A054010 for 25-pin connections. The RJ45 connector of the desired cable must be connected to the RS232 port of the cradle.

Then, it is necessary to insert the power supply plug into the power jack on the base of the cradle and attach the power supply to a power outlet.

Once the Host has been turned on, insert the Formula Color™ terminal into the cradle.

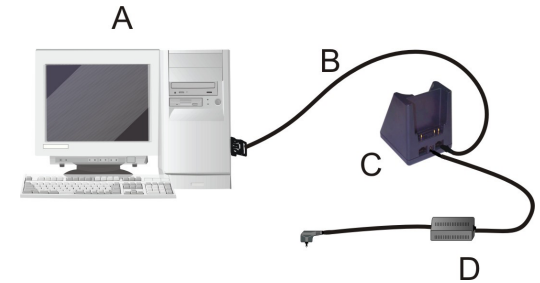


Figure 4 - RS232 Connection

Key:

- A) Host computer
- B) 94A054000 9-pin serial cable  
94A054010 25-pin serial cable
- C) F-COLOR single cradle
- D) 94ACC4595 FPS18 power supply without power cord  
94ACC1150 Power cord EU 3-pin  
94ACC1160 Power cord AUS 3-pin  
94ACC1170 Power cord USA 3-pin  
94ACC1180 Power cord UK 3-pin

## Pinout

The cable 94A054000 allowing the RS232 connection has the following pinout:

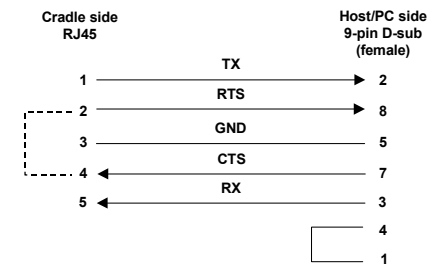


Figure 5 - Cable 94A054000 Pinout

The cable 94A054010 allowing the RS232 connection has the following pinout:

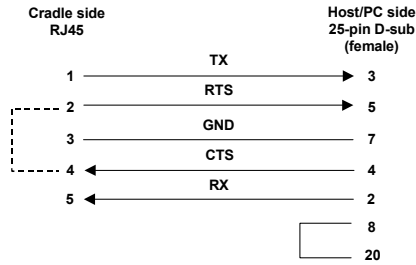



Figure 6 - Cable 94A054010 Pinout

## MODEM CONNECTION

The F-COLOR modem cradle has an integrated modem and provides a modem connector which can be used with an RJ11 connector. It can be connected to a telephone line to transfer data to a Host.

Pin	Name
1	not connected
2	TIP
3	RING
4	not connected

It is not possible to use the serial connection and the modem connection at the same time.



**CAUTION** By default, the F-COLOR modem cradle allows serial communication through the rear RS232 connector (it behaves as a standard cradle unit). It is mandatory to use an appropriate custom software application in order to use the cradle integrated modem port.

## TECHNICAL FEATURES

Electrical Features	
Power supply *	9 VDC Min – 30 VDC Max
Consumption	4 W Max
Indicators	Power LED
Charge time	8 Hours (Li ION batteries)
Communication Features	
Interface	RS232
Baud rate	9600 - 115200
Environmental Features	
Working temperature	0° to +50 °C **
Storage temperature	-20 °C to +60 °C
Humidity	90% non condensing
Degree of protection	IP51
Mechanical Features	
Dimensions	86 x 106 x 90 mm
Weight	350 g


\* Recommended DL power supply: FPS18.

\*\* Batteries must be charged at a temperature ranging from 0° to 45 °C.

## F-COLOR Vehicle Cradle

The F-COLOR vehicle cradle comes with its accessories already assembled. To install it inside a vehicle driving compartment, proceed as follows:

1. mount the metal bracket;
2. mount the cradle to the bracket;
3. connect a regulated power supply between the vehicle's battery and the F-COLOR single cradle.



**CAUTION** Do not connect the cradle directly to the vehicle's battery. Possible voltage surges can damage the cradle or cause it to malfunction.

### Power Cable Specifications:

The power supply cable must have the following characteristics:

Min. Current Capacity	1 A	
Male Plug	Polarity:	positive external negative internal
	Mechanical dimensions:	external diameter: 5.5 mm internal diameter: 2.1 mm
	Metal plug length:	14 mm

Insert the Formula Color™ terminal only after mounting the cradle in the vehicle.

To remove the Formula Color™ terminal from the F-COLOR vehicle cradle, you must first press the plastic retaining clip as shown in the figure and pull the Formula Color™ terminal upwards.

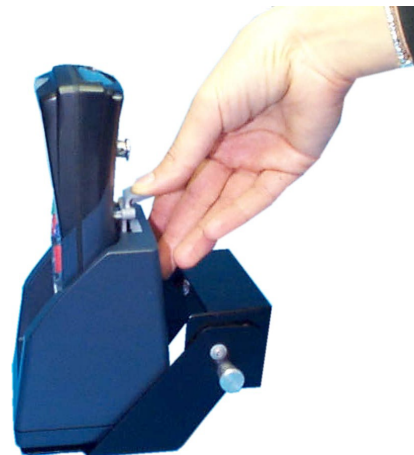


Figure 7 - Removing Formula Color™ Terminal from F-COLOR Vehicle Cradle