Load-Bearing Universal Adapter
Instruction Manual

✅ Use the Load-Bearing Universal Adapter (LBUA) to connect an In-Situ Rugged Cable to a third party cable. The LBUA protects the cable leads from moisture and supports the weight of deployment.

Contents

1 **In-Situ Rugged Cable**

Leads have been trimmed and stripped to the correct length if the cable was ordered as part of this kit.

2 **Cable Grip**

Holds the weight of deployment. Loosen to insert cable and leads. Tighten to prepare for deployment. An integrated slip clutch prevents overtightening.

3 **Waterproof Seal**

Protects cable leads from moisture up to IP67 rating (1 m for up to 30 minutes)

4 **Terminal Block**

Connects the wiring between the two cables

5 **Waterproof Seal**

Protects cable leads from moisture up to IP67 rating (1 m for up to 30 minutes)

6 **Cable Grip**

Holds the weight of deployment. Loosen to insert cable and leads. Tighten to prepare for deployment. An integrated slip clutch prevents overtightening.

7 **3rd-Party Cable**

Trim and strip leads before installing.

Using the Load-Bearing Universal Adapter

✅ For the easiest and most reliable setup, connect all equipment indoors before field deployment. This allows you to work in a protected environment with access to tools and communication equipment.

Tools (Not Included)

- Wire cutters and strippers
- Small screwdriver
- Multimeter (optional)

Other Components

- VuLink
- Rugged Cable
- VuSitu Mobile app
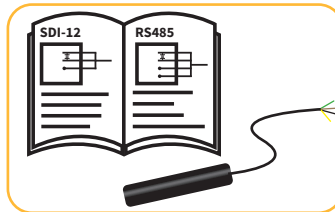- 3rd-Party Instrument
- Cable for your 3rd-party instrument

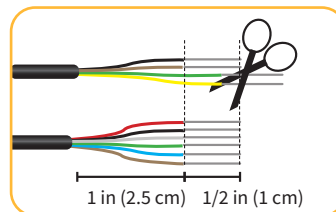## 1 Prepare Instruments and Cables

✅ Set communication settings and outputs as needed for your instrument before connecting to VuLink.
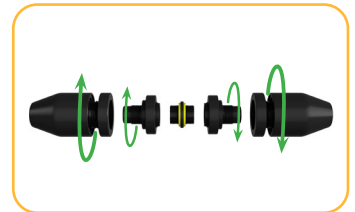

Configure your instrument according to manufacturer instructions.

Review manufacturer communication and wiring information for your instrument.
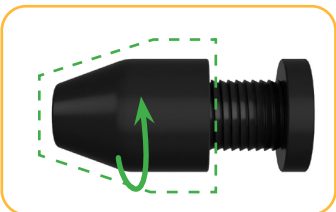

1 in (2.5 cm)   1/2 in (1 cm)

Trim and strip instrument wires so there is 1 inch of colored wire jacket and 1/2 inch of bare wire.
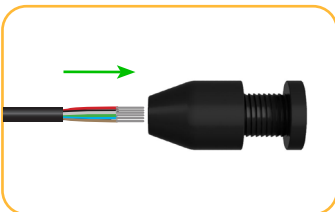

Unscrew the LBUA into individual components. You can see each part on the previous page.
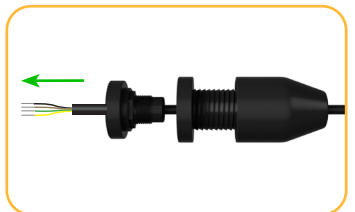
2 Thread Cables Through LBUA

Twist the outer part of each cable grip to loosen the grip. Leave grips loose so the cable can move freely during installation.

Insert cable and leads through cable grip. You can tape the leads together to make this step easier.
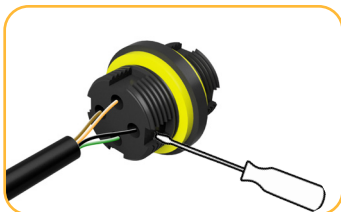

Insert cable and leads through waterproof connector.

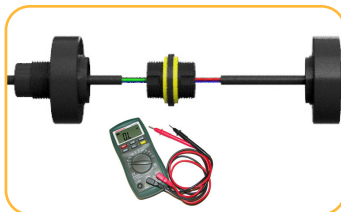Repeat with the other cable on the other side of the LBUA.
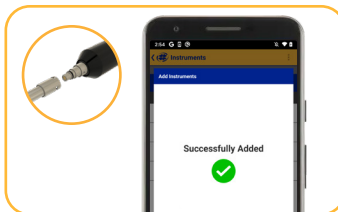
3 Connect Leads to Terminal Block

⚠️ The wire colors for your instrument may not correspond to the same colors on the In-Situ cable. Refer to the instrument manual and wiring diagram below to determine the correct wiring for your application.
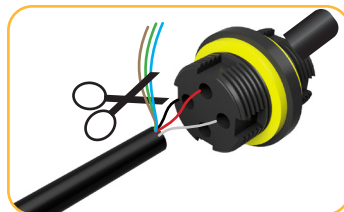

Loosen terminal screws. Insert instrument wires into one side of the terminal block. Tighten the screws.

Insert each wire from the In-Situ cable into the terminal opposite the corresponding instrument wire. Test continuity (optional).
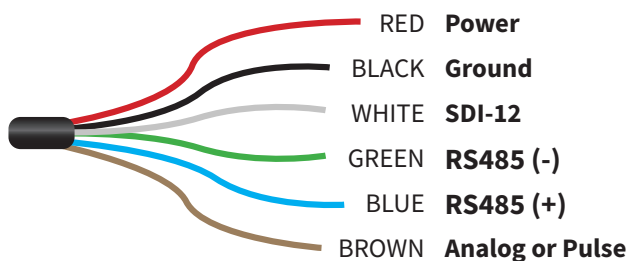

Connect the cables to the instrument and VuLink. Use the VuSitu mobile app to confirm that the instrument is communicating with VuLink.

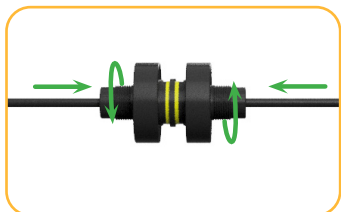After you have confirmed communication, cut all unused leads.

IN-SITU RUGGED CABLE WIRING DIAGRAM

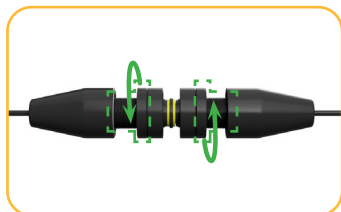| RED | **Power** |
BLACK	**Ground**
WHITE	**SDI-12**
GREEN	**RS485 (-)**
BLUE	**RS485 (+)**
BROWN	**Analog or Pulse**

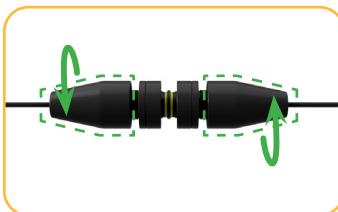## 4 Tighten Connections for Deployment

⚠️ Check that the yellow waterproof seal is tight around the cable jacket, not the wires. A loose seal may compromise waterproofing.
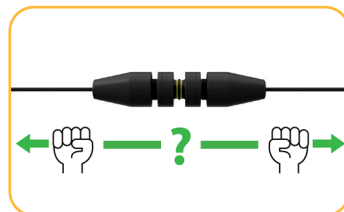

Twist waterproof seals to tighten them firmly against the terminal block. Make sure both cables are fully seated against the seals.

Tighten inner cable grip insert firmly around waterproof seals.

Tighten outer cable grips around the cables. Twist until they click.

Pull on the cables to check that the deployment is secure.

Specifications

GENERAL	LOAD-BEARING UNIVERSAL ADAPTER
Wetted Materials	Nylon, Silicone, Stainless Steel, Cyanoacrylate Adhesive
Wired Connections Supported	4
Accepts Cable Diameters	5-9 mm (0.15 in to 0.350 in)
Dimensions	Length: 19.05 cm (7.5 in) Diameter: 4.45 cm (1.75 in)
Operating Temperature	-5° C to 50° C
Supported Weight Limit	30 lbs (13.6 kg) at 50° C
IP Rating	IP67
Warranty	1 year

Technical Support

For service, repair, or technical support, scan the QR code or visit www.in-situ.com/technical-support to contact our skilled support team in your area by chat, email, or phone. Be sure to have the following information available:

- Product model
- Serial number located on the instrument label
- Description of the problem, including how the product was used and the conditions noted at the time of the malfunction

Your equipment was carefully inspected before shipping. Save packing materials for future storage and shipping of your equipment. Check the equipment for any physical damage sustained during shipment. Notify In-Situ and file a claim with the carrier if there is any such damage. Do not attempt to deploy or operate the equipment.