

# Manual Supplement

Manual Title: 1742/1746/1748 Users Supplement Issue: **3**  
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This supplement contains information necessary to ensure the accuracy of the above manual.

## Change #1, 562

On page 28, replace the Note with:

*Note*

*Most power quality standards, such as EN 50160, 9, GOST 33073 refer to IEC 61000-4-30 Class A measurement methods that require Harmonic Sub-Groups.*

Under examples replace the first paragraph with:

Select Harmonic Components for measurements according to standards that require the harmonics components measurement according to IEC 61000-4-7, for example IEEE 519 or IEC 61000-3-12.

On page 52, under **Environmental Specifications** replace the Operating Temperature with:

Operating.....-25 °C to +50 °C (-13 °F to +122 °F) warm up the Product to -10 °C (14 °F) before you turn on power.

## Change #2, 597

On page 12, replace the **Measurement Line Power Source** section with:

### **Measurement Line Power Source:**

#### **⚠⚠ Warning**

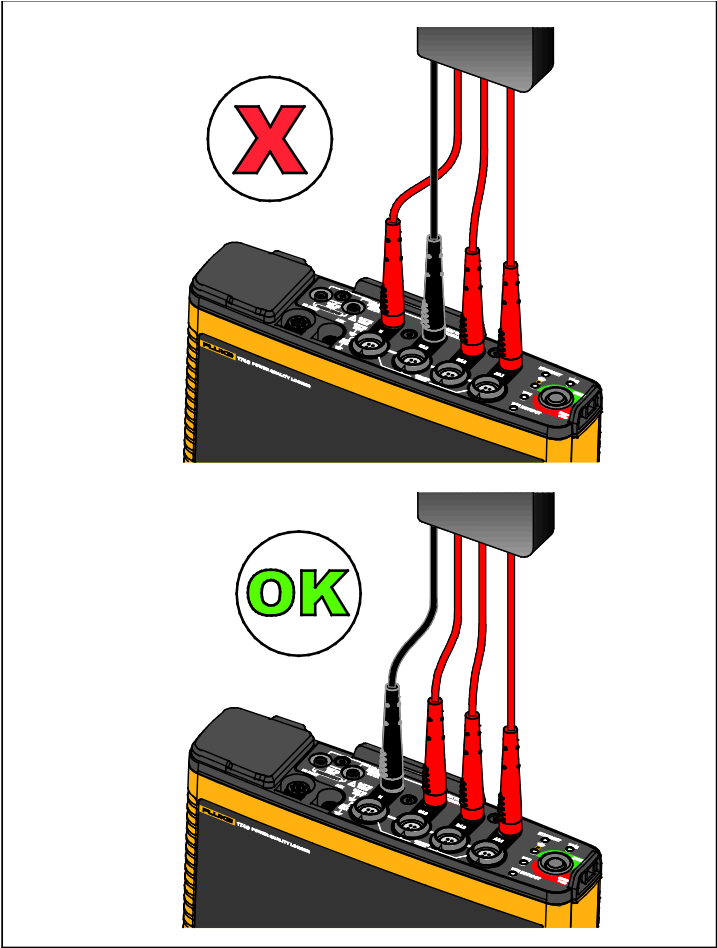
**To prevent injury, do not touch the metal parts of one test lead when the other is still connected to hazardous voltage.**

#### **⚠ Caution**

**To prevent damage to the Product, make sure the measured voltage does not exceed the input rating of the power supply.**

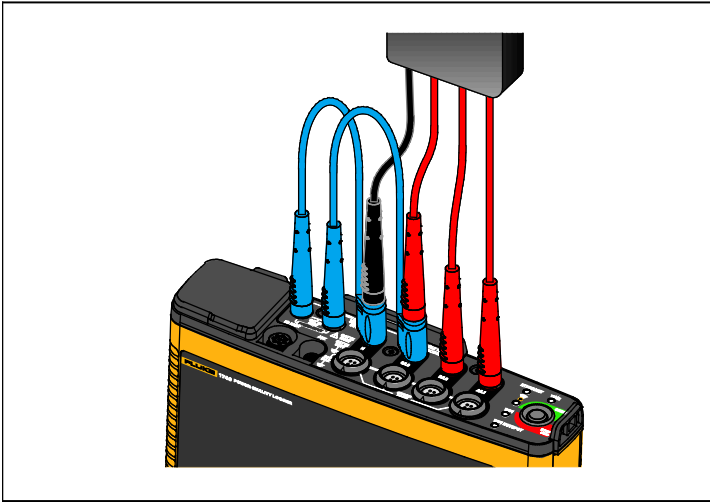
1. Attach the power supply to the Logger.
2. Move the slide-cover on the power supply to access the safety sockets.
3. Connect the short test leads (see Figure 7B & 7C) with the power supply inputs. Make sure to use the non-stackable plugs. The test leads are rated for measurement/overvoltage CAT III 1000 V and CAT IV 600 V.
4. Connect the test leads with the voltage measurement inputs:
  - Connect A/L1 with one input of the power supply.
  - Connect N with the second input of the power supply.OR
  - Connect A/L1 with one input of the power supply.
  - Connect B/L2 with the second input of the power supply.
5. Use the short fan out of the Voltage Test Lead, 3-phase + N. Plug the connector A/L1 into the socket A/L1 of the voltage measurement inputs of the Logger. Repeat this with B/L2, C/L3 and N.

- For measurement connection to the Logger (see Figure 7A):



**Figure 7A: Measurement connection to the Logger**

- To supply power to the Logger from installations with neutral voltage (see Figure 7B):



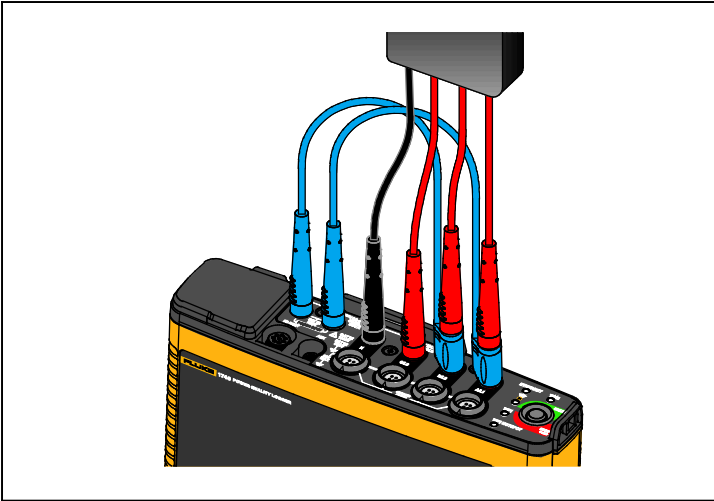
**Figure 7B: Measurement with neutral voltage and supplying instrument power.**

*Note*

*You must locate and connect an alternate power source to the instrument if the voltage to measure is <math><100\text{ V}</math> or <math>>500\text{ V}</math>. Use the set of 2 m test leads (item 7 in Figure 16) or the supplied power cord.*

6. Connect the voltage inputs to the test points.  
The Logger automatically turns on and is ready to use in <math><30</math> seconds.

- To supply power to the Logger from installations without neutral voltage (see Figure 7C):



**Figure 7C: Measurement without neutral voltage and supplying instrument power.**

*Note*

*You must locate and connect an alternate power source to the instrument if the voltage to measure is <100 V or >500 V. Use the set of 2 m test leads (item 7 in Figure 16) or the supplied power cord.*

7. Connect the voltage inputs to the test points.  
The Logger automatically turns on and is ready to use in <30 seconds.

## Change #3, 705

On page 5, replace **Before You Start**, with:

Your purchase includes these items. Carefully unpack and inspect each of the items:

- Logger
- Soft Storage Bag/Case
- Voltage Test Lead, 3-phase + N
- 2x Alligator Clips, Blue
- 4x Alligator Clips
- Set of Wire Clips
- Mains Power Cable (see Table 2)
- Mains Adapter MA-C8
- Set of 2 test leads, stack and non-stackable, blue, 18 cm (7 in)
- Set of 2 test leads, non-stackable, blue, 2 m (79 in)
- USB Cable A, mini-USB
- Documentation Info Pack (Quick Reference Card, Safety Information, iFlex Probe Safety Information)
- USB Drive, includes Users Manual, Fluke Energy Analyze Plus (PC application software) and Open Source software
- Magnet Hanger Kit (1748 only)
- 4x Magnet Probes (1746/1748 only)
- Thin-Flexi Current Probe IP65
  - Model 174x/15: 4x i17xx-flex1500IP, 61 cm (24 in)
  - or
  - Model 174x/30: 4x i17xx-flex3000IP, 61 cm (24 in)
- 2x WiFi Adapter or WiFi/BLE-to-USB Adapter

On page 9, replace Table 3 with:

**Table 3. Accessories**

<b>Part ID</b>	<b>Description</b>
1742-6/UPGRADE	1742 to 1746 Upgrade <sup>[1]</sup>
1742-8/UPGRADE	1742 to 1748 Upgrade <sup>[1]</sup>
1746-8/UPGRADE	1746 to 1748 Upgrade <sup>[1]</sup>
IEEE519/REPORT	Software License for IEEE 519 Reporting
IP65 VOLT CONN	IP65 Rated Voltage Connector
3PHVL-1730-5M	Cable Assembly, Voltage Test Lead 3-phase + N 5 m
I17XX-FLEX1.5KIP	Fluke-17xx IP65 iFlexi 1.5 kA 24 in/60 cm
17XX-FLEX1.5KIP/3PK	Fluke-17xx IP65 iFlexi 1.5 kA 24 in/60 cm, 3 pack
I17XX-FLEX1.5KIP/4PK	Fluke-17xx IP65 iFlexi 1.5 kA 24 in/60 cm, 4 pack
I17XX-FLEX3KIP	Fluke-17xx IP65 iFlexi 3 kA 24 in/60 cm
I17XX-FLEX3KIP/3PK	Fluke-17xx IP65 iFlexi 3 kA 24 in/60 cm, 3 pack
I17XX-FLEX3KIP/4PK	Fluke-17xx IP65 iFlexi 3 kA 24 in/60 cm, 4 pack
I17XX-FLEX6KIP	Fluke-17xx IP65 iFlexi 6 kA 36 in/90 cm
I17XX-FLEX6KIP/3PK	Fluke-17xx iFlexi 6 kA 36 in/90 cm, 3 pack
I17XX-FLEX6KIP/4PK	Fluke-17xx iFlexi 6 kA 36 in/90 cm, 4 pack
I17XX-FLEX5M-EXT	Fluke-17xx iFlexi Extension Cable 5 m
FTP-17xx	Fused Probe Set (3 red/ 1 black)
MP1-3R/1B	Magnet Probe 1 (3 red/1 black)
i40s-EL	Current Clamp 40 A (single) Current Clamp
FLUKE-174X GPS-REC	GPS Receiver Antenna
Fluke PQ Markers	Cable Markerset 3 phase + N + PE
174x-HANGER KIT	Magnet Hanger Kit
FLUKE-17XX AUX	Auxiliary Input Adapter for 17xx



Wall Outlet Adapter	Wall Outlet Adapter MA-C8
BP1730-Battery Pack	BP1730-Battery Pack
Test Leads 0.18m	0.18 m (7 in.) Test Lead Set, blue
Test Leads 2m with alligator clips	2.0 m (79 in.) Test Lead Set plus 2x alligator clips, blue
Voltage Test Lead 3-phase + N, 2m (79 in.)	3PHVL-17xx Voltage Test Lead 3-phase + N, 2m (79 in.)
Voltage Test Lead 3-phase + N, 5m (197 in.)	3PHVL-17xx, 5 M Voltage Test Lead 3-phase + N, 5 m (197 in.)
Power Quality Window	PQ-400 Power Quality Window (PQ-400B / PQ-400)
i400S-EL	400 A (single) Current Clamp
i400S-EL/3PK	Set of 3 Current Clamps, 400 A
<b>Soft Case</b>	
IEEE 519/Report	Software License for IEEE 519 Reporting
FLK-WIFI/BLE	WiFi/BLE to USB Adapter (check with your sales contact for availability)
[1] Upgrade includes hardware items included with model upgrade (see <i>Licensed Features</i> )	

On page 43, Table 7, replace Ref. 6, 7, 8, and 9 with:

6	Test Leads 0.18 m blue, 1000 V CAT III	1 set	5016873
7	Test Leads 2 M, 2x alligator clips, blue, 1000 V CAT III	1 set	5020006
8	Cable marker	1 set	5046009
9	USB Drive, includes Users Manual, Fluke Energy Analyze Plus (PC application software) and Open Source software	1	N/A

On page 44, replace Figure 16, with:

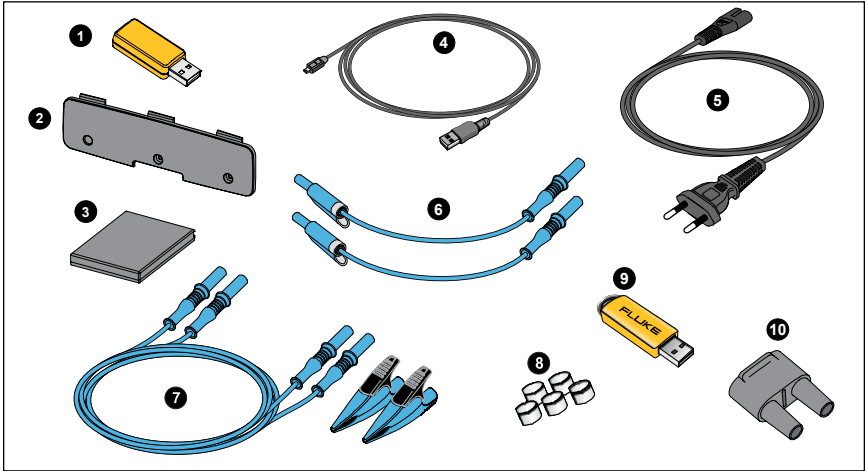


Figure 16. Replacement Parts