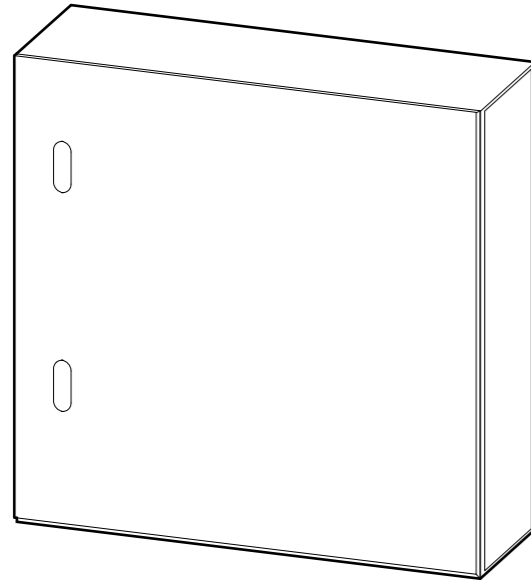


Symmetra® MW UPS Sync Box



IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

This guide contains important safety instructions that should be followed when handling the UPS Sync Box.



WARNING: ALL safety instructions in this document shall be read, understood and followed. Failure to do so could result in equipment damage, serious injury, or death.



WARNING: UPS Sync Box contains hazardous AC voltages. Only qualified electricians may install the unit.



Caution: The unit contains components that are sensitive to electrostatic discharge (ESD). Follow proper ESD procedures to avoid damaging electronic components.

Symbols used



WARNING: Indicates an electrical hazard, which, if not avoided, could result in injury or death.



Caution: Indicates a hazard, which, if not avoided, could result in injury or death.



Note: Indicates important information.

Specifications

Input Specifications

Nominal voltage	400–480 V +/-10% + ground
Input current	40–90 mA
Input frequency	50/60 Hz
Supply the unit from a dedicated, grounded 3–wire Wye service.	

Torque Specifications

Connector	Torque
M4	1 - 1.5 Nm
M5	2.5 - 3 Nm
J120-J122 and J127-J133	0.5 - 0.6 Nm

Regulatory Agency Approval

The UPS system is listed according to the UL or CE norms as applicable.



Receiving – External inspection

Before unpacking unit inspect the shipping material for any signs of damage or mishandling. Do not attempt to install the system if damage is apparent. If any damage is noted, file a damage claim with the shipping agency within 24 hours, and contact Schneider Electric Technical Support to inform of the damage claim and the condition of the shipment.

Compare the components of the shipment with the bill of lading. Report any missing items to the carrier and to Schneider Electric Technical Support immediately.

Verify that labelled units match the order confirmation.

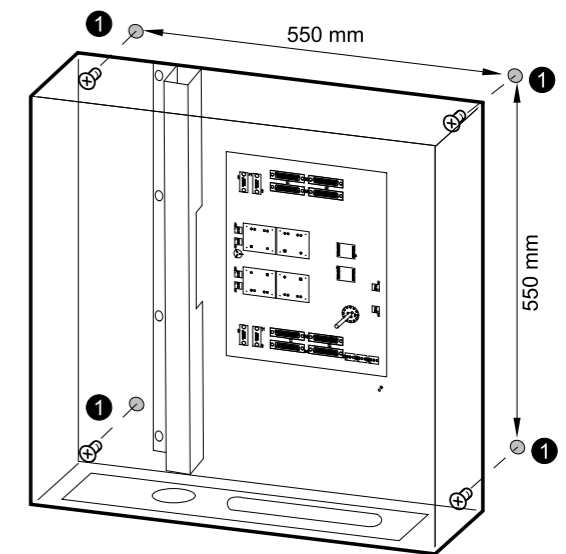


Note: Shipping materials are recyclable. Please re-use or dispose of appropriately.

Operating Environment

Temperature range 0° to 40°C / 32° to 104°F	Keep Ventilated	Relative humidity <95% Non-condensing	No Conductive Dust or Corrosive Fumes

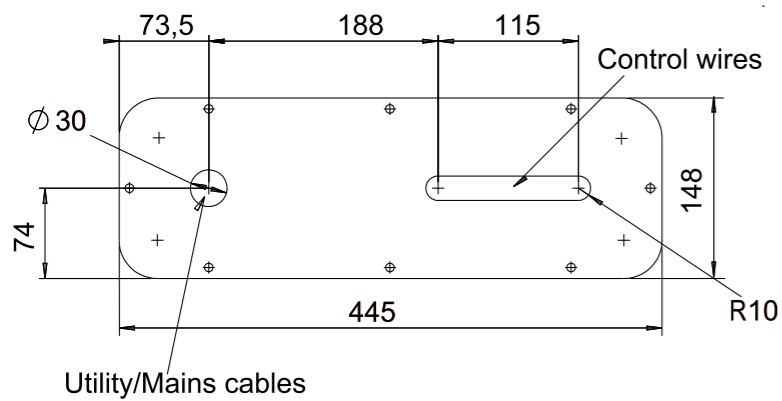
Mount the UPS Sync Box to the Wall



1. Mark the four mounting hole locations on the wall. Drill holes in each of the four marked locations and install plugs.
2. Place the UPS Sync Box against the wall lining up with the holes and secure the enclosure to the wall with four screws. **The unit is not intended to be mounted on a drywall.**

Prepare for Cables

Make holes for power and signal cables in the bottom plate of the Symmetra MW UPS Sync Box according to the below illustration.

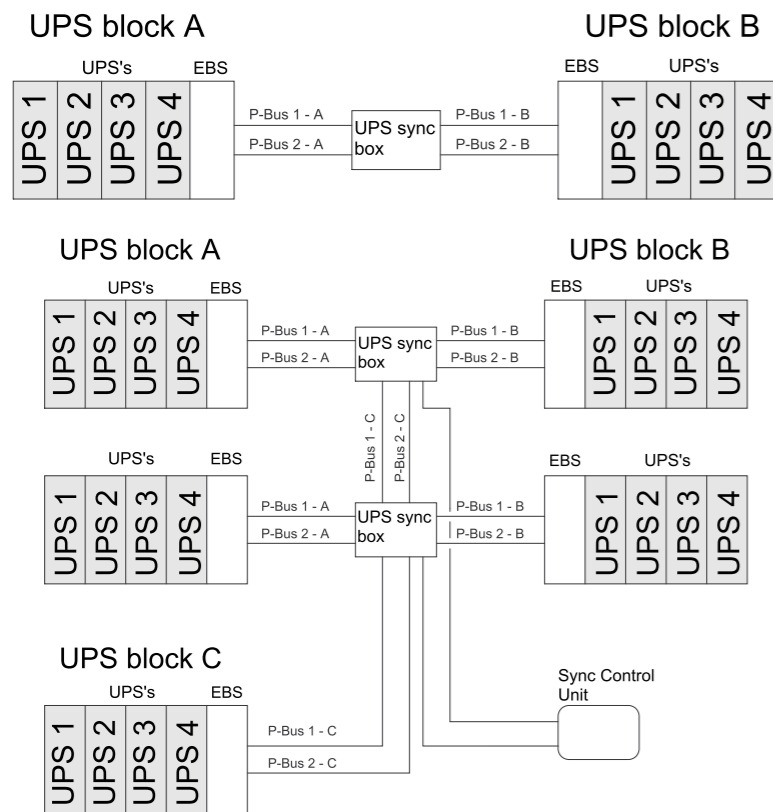


Control Wiring Principle



Note: The Sync Control Unit in these drawings is an engineered to order part.

Systems with External Bypass Static Switch



Inputs

With the inputs J131 and J132 you can control which units should synchronize. It requires that the rotary switch is set to "Remote".

PLC SW1 J131	PLC SW2 J132	Functionality
Open	Open	A-B
Closed	Open	A-C

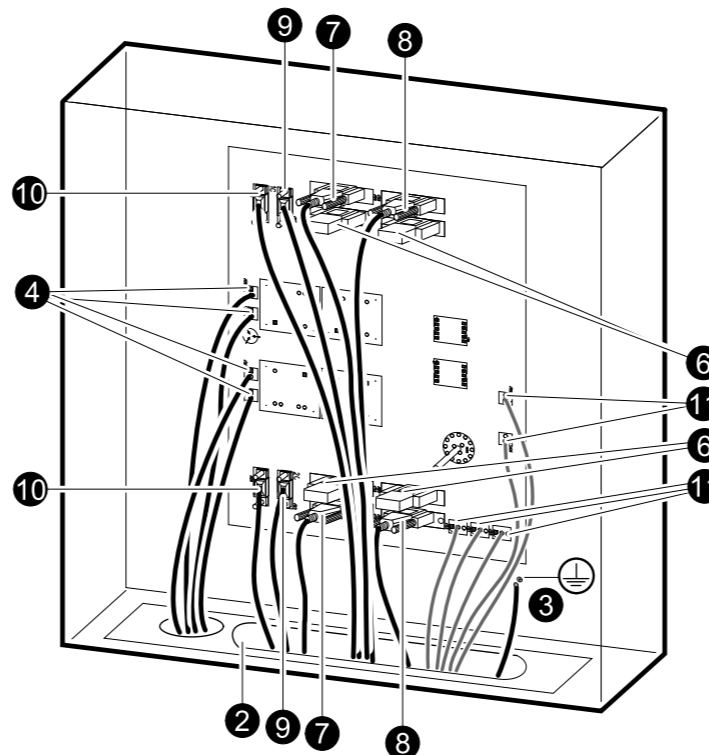
PLC SW1 J131	PLC SW2 J132	Functionality
Open	Closed	B-C
Closed	Closed	A-B

Outputs

The outputs indicate the status of the sync switch box.

Output	Connector	Function (active state)
Out 1	J133	Internal Power Supply OK
Out 2	J122	A-B
Out 3	J121	A-C
Out 4	J120	B-C

UPS Sync Box Cable Landings



1. Remove the transparent cover (not shown) over utility/mains terminals and the black wire cover using a torx screwdriver.
2. Route cables through the bottom of the UPS Sync Box.
3. Connect ground cable.
4. Connect J127, J128, J129 and J130 to UPS output using external fuses in each line (rated 1 A 480 V slow).
5. Re-mount the black wire cover over the high voltage field wiring and the transparent cover (not shown) over the utility/mains terminals.
6. Move terminators from UPS Block A and UPS Block B to the UPS Sync Box.

7. Connect UPS Sync cables between UPS Block A connection plane and UPS Sync Block A connectors using specified cables (see table below).
8. Connect UPS Sync cables between UPS Block B connection plane and UPS Sync Block B connectors using specified cables (see table below).
9. For system with C block: Connect UPS Sync cables between UPS Block C connection plane and UPS Sync Block C connectors using specified cables (see table below).
10. For system with C block: Connect UPS Sync cable between this box and the next UPS Sync Box, if present.
11. For system with C block: Connect control wires to J131, J132 and J120, J121, J122.
12. Change jumper settings if needed according to table.

Default jumper settings			
J104		Closed	Only one AC source needed for "Internal Power OK"
J105	Closed		Both PBUS's powered in order for "Internal Power OK"
J106	Closed		
J107		Closed	
Personalised jumper settings			
J104		Closed	Only one AC source needed for "Internal Power OK"
J105	Closed		Only one PBUS powered in order for "Internal Power OK"
J106		Closed	
J107	Closed		
Personalised jumper settings			
J104	Closed		Both AC sources needed for "Internal Power OK"
J105		Closed	Both PBUS's powered in order for "Internal Power OK"
J106	Closed		
J107		Closed	
Personalised jumper settings			
J104	Closed		Both AC sources needed for "Internal Power OK"
J105		Closed	Only one PBUS powered in order for "Internal Power OK"
J106		Closed	
J107	Closed		

UPS Sync Cables	Description	Use in Block
SYMWSUCBL200	APC Symmetra MW UPS Sync Cable 200 m	A/B
SYMWSUCBL100	APC Symmetra MW UPS Sync Cable 100 m	A/B
SYMWSUCBL50	APC Symmetra MW UPS Sync Cable 50 m	A/B
SYMWSUCBL25	APC Symmetra MW UPS Sync Cable 25 m	A/B
SYMWSUSWG CBL200	APC Symmetra MW UPS Sync Swing Cable 200 m	C
SYMWSURPT CBL250	APC Symmetra MW UPS Sync Repeater Cable 250 m	C