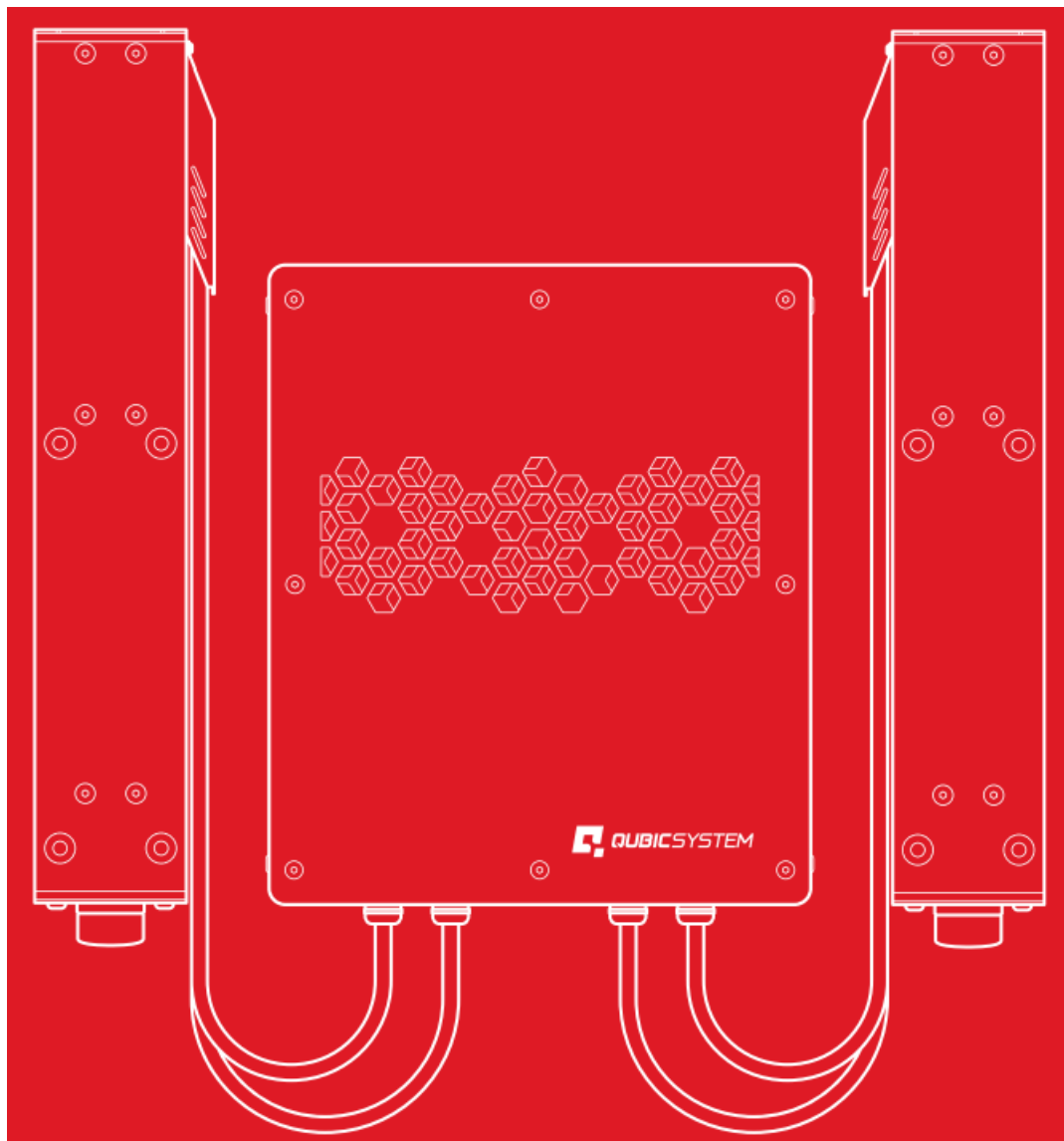




## QUBICSYSTEM QS-220 Motion System User Guide

[Home](#) » [QUBICSYSTEM](#) » QUBICSYSTEM QS-220 Motion System User Guide 





## Contents

### [1 INTRODUCTION](#)

### [2 CONNECTING "C" WITH "B"](#)

### [3 CONNECTING "C" WITH "A"](#)

### [4 CONNECTING "A" WITH "B"](#)

### [5 Documents / Resources](#)

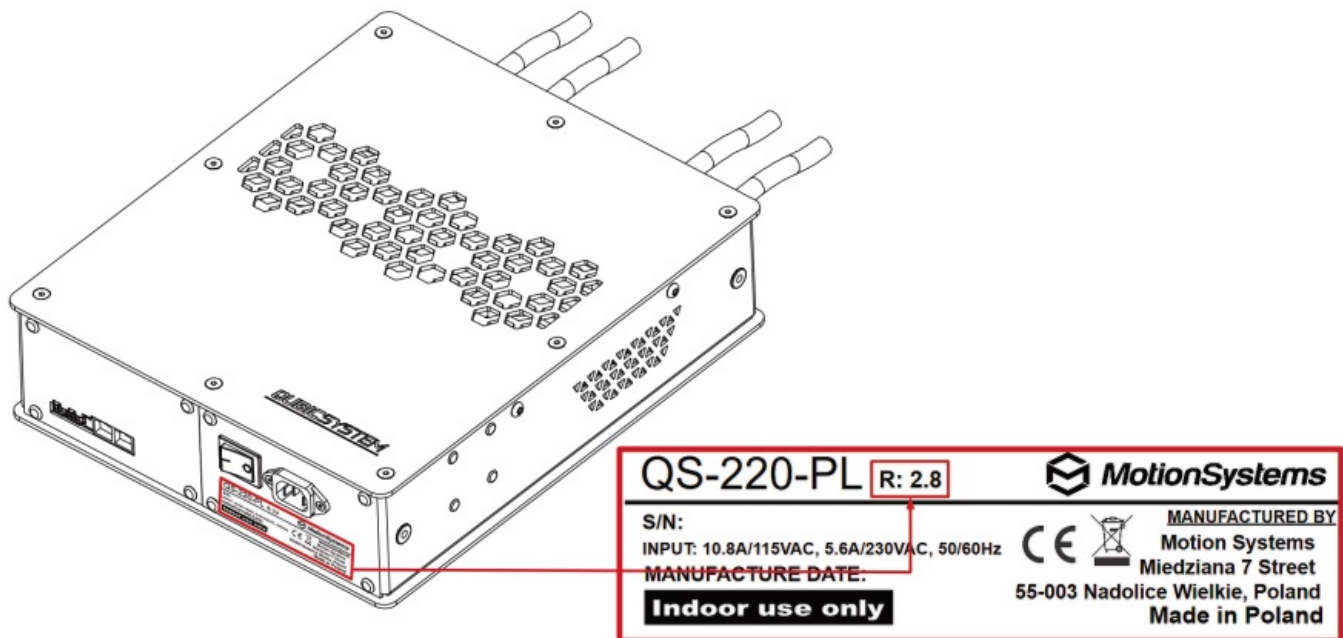
### [6 Related Posts](#)

## INTRODUCTION

Depending of the system revision, motion-lock connections between sets may vary and may need conversion kits. There are following main revision groups:

- Type A – R2.5.x
- Type B – R2.6.x, 2.7.x, 2.8.x
- Type C – R3.x.x

Systems within each revision group are 100% compatible and don't require any additional cables. However if you need to connect together systems that belong to different groups, make sure to get correct wire harnesses first. System revision can be found on the rating plate located on the QS-SB2 power cabinet under main power switch :

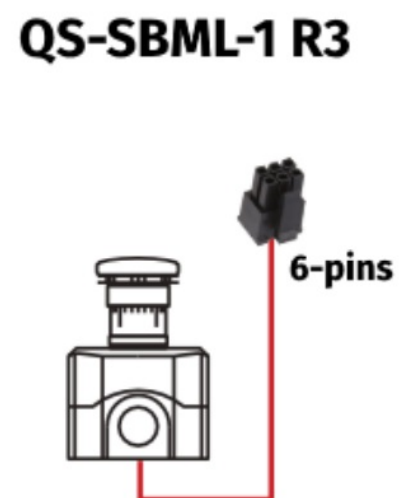
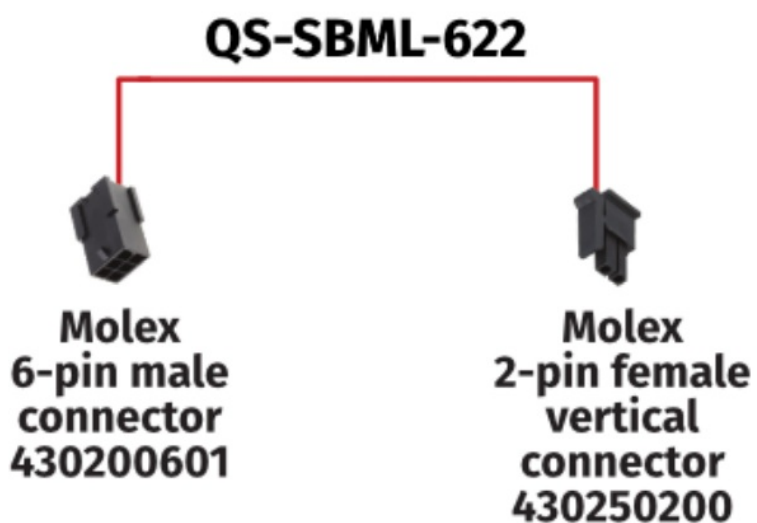


### General guidelines are as follows:

1. If different revisions of QS-SB2 are connected together, then only order of the MOTION-LOCK cables connection matters.
2. Start connecting conversion kit by plugging in the MOTION-LOCK switch first.
3. Always connect MOTION-LOCK switch to the power cabinet with the highest revision.
4. Connection order of M-BUS cables does not matter, you can connect M10 controller to the power cabinet of your choice.
5. Remember to keep the CFG switches setting according to appropriate layout.

### CONNECTING "C" WITH "B"

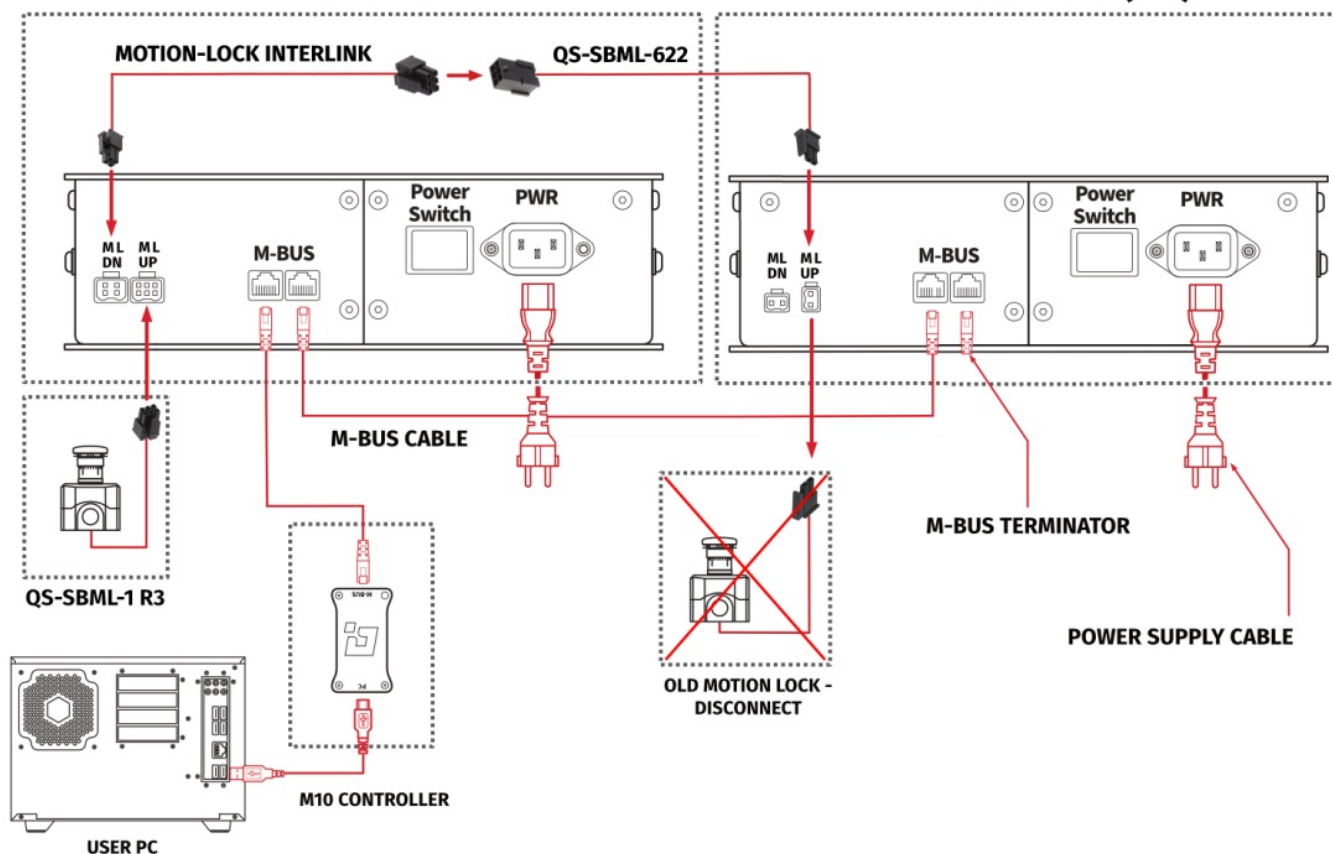
#### Required adapters:



#### Connections diagrams:

## TYPE C

## TYPE B (x2)



### Steps:

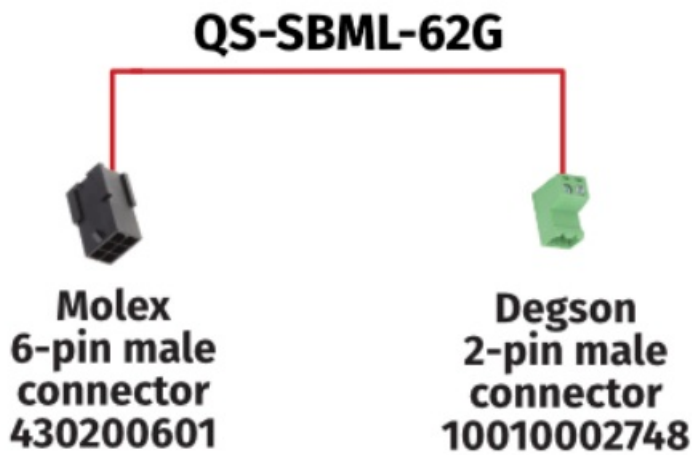
1. Disconnect old 2-pin MOTION-LOCK switch, it won't be needed anymore.
2. Connect new 6 pins QS-SBML-1 R3 MOTION-LOCK switch into the ML UP port in the Type C power cabinet.
3. Connect one end (4-pins) of MOTION-LOCK INTERLINK cable to the ML DOWN port in the Type C power cabinet.
4. Connect another end (6-pins) of MOTION-LOCK INTERLINK cable to QS-SBML-622 adapter.
5. Connect another end (2-pins) of QS-SBML-622 adapter to ML UP port in the Type B power cabinet.
6. If you have yet another Type B power cabinet (2 in total), then connect it to Type B using its standard wire harness – refer to the interconnections scheme in the original user manual.
7. Connect M-BUS cables and M10 in the order of your selection – it does not matter where the bus start and ends.
8. Plug M-BUS terminator into empty M-BUS port.
9. Plug in the power cables with adequate plugs into power sockets.
10. Set the appropriate position on the CFG switch according to the actuators layout of your choice (more information about CFG switch position and layout selection can be found in the original user manual).

### INFO

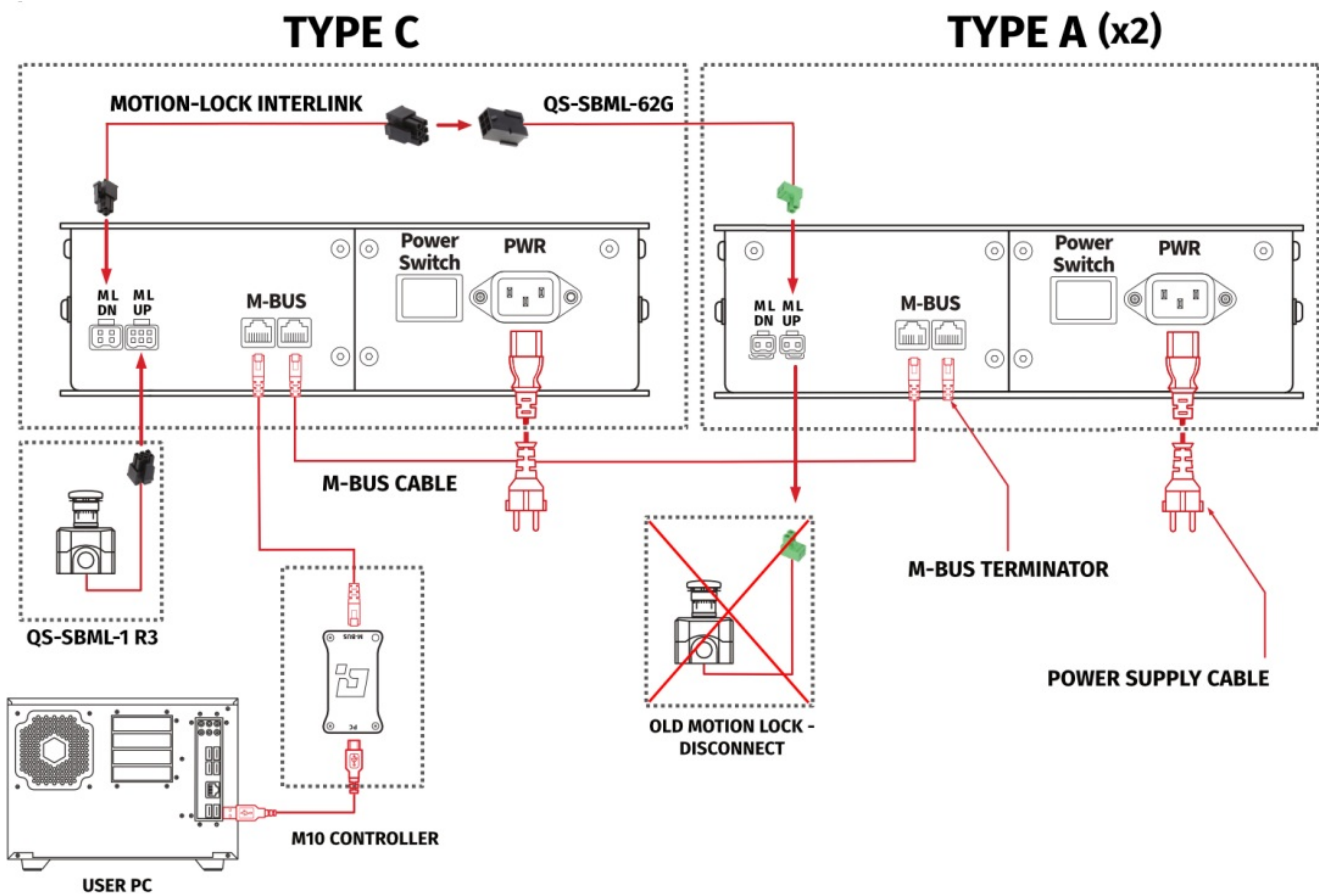
Refer to original QS-220, QS-CH2, QS-V20 and QS-S25 user manuals to see how to configure DIP switches and layouts. When 1x QS-220 is installed in the cockpit on the QS-CH2, then the DIP switch in QS-CH2 must be configured to Actuator 3-4. When 2x QS-220 (typical scenario) are installed in the cockpit on the QS-CH2, then the DIP switch in QS-CH2 must be configured to Actuator 5-6.

### CONNECTING "C" WITH "A"

Required adapters:



Connections diagram:



Steps:

1. Disconnect old 2-pin MOTION-LOCK switch, it won't be needed anymore.
2. Connect new 6 pins QS-SBML-1 R3 MOTION-LOCK switch into the ML UP port in the Type C power cabinet.
3. Connect one end (4-pins) of MOTION-LOCK INTERLINK cable to the ML DOWN port in the Type C power cabinet.
4. Connect another end (6-pins) of MOTION-LOCK INTERLINK cable to QS-SBML-62G adapter.
5. Connect another end (2-pins) of QS-SBML-62G adapter to ML UP port in the Type A power cabinet.
6. If you have yet another Type A power cabinet (2 in total), then connect it to Type A using its standard harness –

refer to the interconnections scheme in the original user manual.

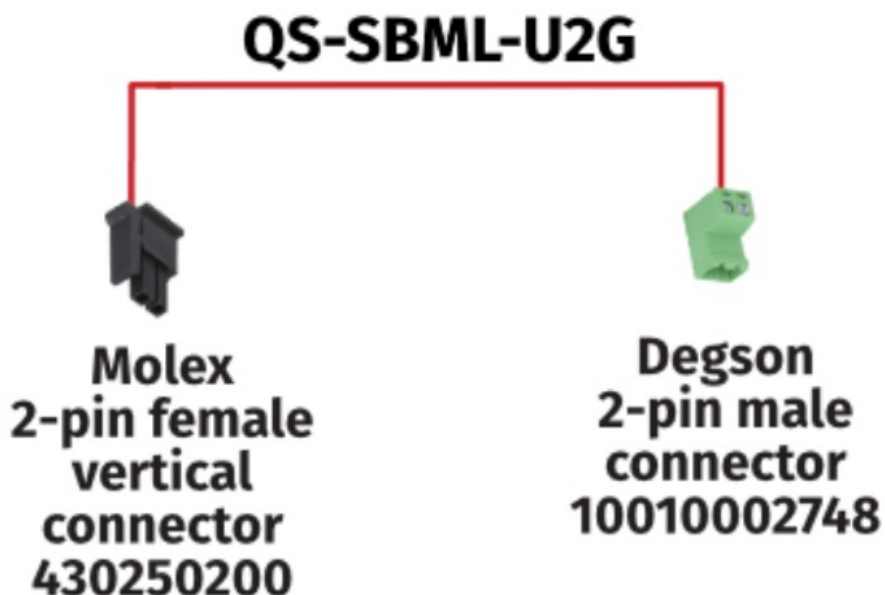
7. Connect M-BUS cables and M10 in the order of your selection – it does not matter where the bus start and ends.
8. Plug M-BUS terminator into empty M-BUS port.
9. Plug in the power cables with adequate plugs into power sockets.
10. Set the appropriate position on the CFG switch according to the actuators layout of your choice (more information about CFG switch position and layout selection can be found in the original user manual).

#### **INFO**

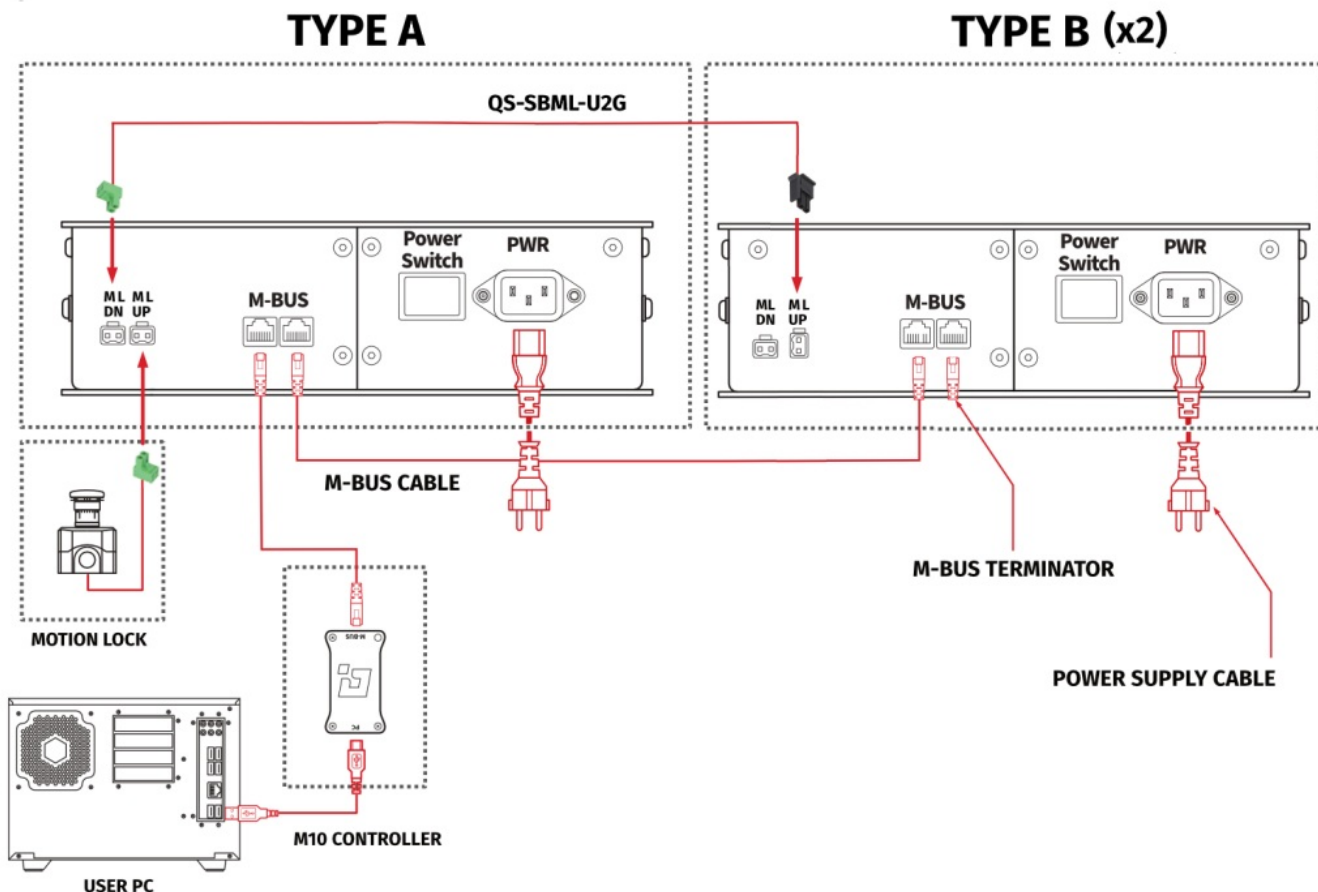
Refer to original QS-220, QS-CH2, QS-V20 and QS-S25 user manuals to see how to configure DIP switches and layouts. When 1x QS-220 is installed in the cockpit on the QS-CH2, then the DIP switch in QS-CH2 must be configured to Actuator 3-4. When 2x QS-220 (typical scenario) are installed in the cockpit on the QS-CH2, then the DIP switch in QS-CH2 must be configured to Actuator 5-6.

### **CONNECTING "A" WITH "B"**

**Required adapters:**



**Connections diagram:**



### Steps:

1. Connect 2 pins MOTION-LOCK switch into the ML UP port in the Type A power cabinet per original user manual.
2. Connect one end (2-pins, green plug) of QS-SBML-U2G adapter to the ML DOWN port in the Type A power cabinet.
3. Connect another end (2-pins, black plug) of QS-SBML-U2G adapter to ML UP port in the Type B power cabinet.
4. If you have yet another Type B power cabinet (2 in total), then connect it to Type B using its standard harness – refer to the interconnections scheme in the original user manual.
5. Connect M-BUS cables and M10 in the order of your selection – it does not matter where the bus start and ends.
6. Plug M-BUS terminator into empty M-BUS port.
7. Plug in the power cables with adequate plugs into power sockets.
8. Set the appropriate position on the CFG switch according to the actuators layout of your choice (more information about CFG switch position and layout selection can be found in the original user manual).

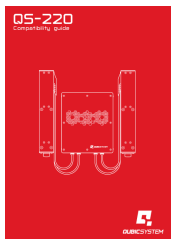
### INFO

Refer to original QS-220, QS-CH2, QS-V20 and QS-S25 user manuals to see how to configure DIP switches and layouts. When 1x QS-220 is installed in the cockpit on the QS-CH2, then the DIP switch in QS-CH2 must be configured to Actuator 3-4. When 2x QS-220 (typical scenario) are installed in the cockpit on the QS-CH2, then the DIP switch in QS-CH2 must be configured to Actuator 5-6.





## Documents / Resources



[QUBICSYSTEM QS-220 Motion System](#) [pdf] User Guide  
R2.5.x, R2.6.x, 2.7.x, 2.8.x, R3.x.x, QS-220 Motion System, Motion System

[Manuals+.](#)