

Recommended setup for a 16-IMUs network on the human body

The 16 IMUs must be connected in groups to the Tech IMU Ports (1-4) available on the hub (Tech-HUB V3), 4 IMUs per port. As a result, the 4 obtained networks will deploy the power supply from the hub to the IMUs adequately, see figure 1.

Note: The maximum number of IMUs that can be connected in each port is 4.

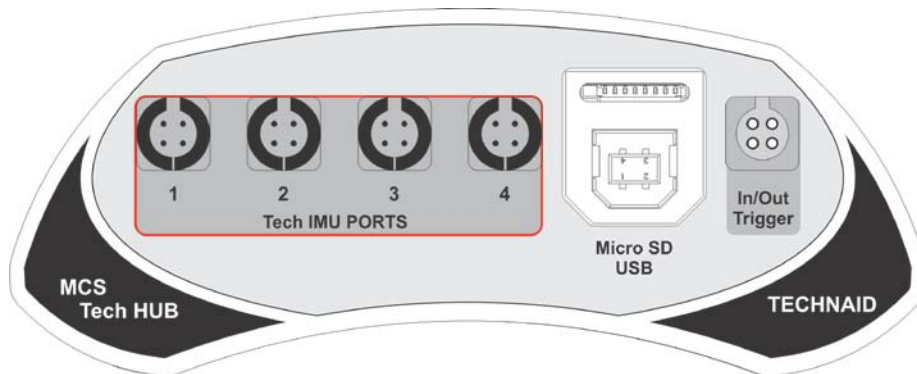


Figure 1: Tech IMU Ports in the connection panel of the Tech-HUB V3.

The four networks are set out as follows:

Network 1 for port 1 (4 IMUs):	Network 3 for port 3 (4 IMUs):
Left hand Left forearm Left arm Left scapula	Left foot Left leg Left thigh Head (in the center of the back of the head)
Network 2 for port 2 (4 IMUs):	Network 4 for port 4 (4 IMUs):
Right foot Right leg Right thigh Chest or lumbar	Right hand Right forearm Right arm Right scapula

The cables of the 4 IMU's networks are grouped per colors and each group has a reference. The goal is to identify the cables quickly and to reduce installation time. Therefore, the system has only five types of cables, which are:

Type	Quantity	Colors	Reference
1	4	Red 	C-C01-01-BR-MCSV3
2	2	White-Red 	C-C02-01-BRH-MCSV3
3	4	Blue 	C-C03-01-PI-MCSV3
4	1	White-Brown-Blue 	C-C04-01-PICH-MCSV3
5	1	White-Yellow-Blue 	C-C05-01-PILH-MCSV3

The types of cables used to connect the IMUs of each network are:

# Network	Cables	Connections	Figures
1	Two cables type 1. One cable type 2.	Left hand Left forearm Left arm Left scapula	Figure 2 y figure 4.
2	Two cables type 3. One cable type 5.	Right foot Right leg Right thigh Chest or lumbar	Figure 3 y figure 4.
3	Two cables type 3. One cable type 4.	Left foot Left leg Left thigh Head	Figure 3 y figure 4.
4	Two cables type 1. One cable type 2.	Right hand Right forearm Right arm Right scapula	Figure 2 y figure 4.

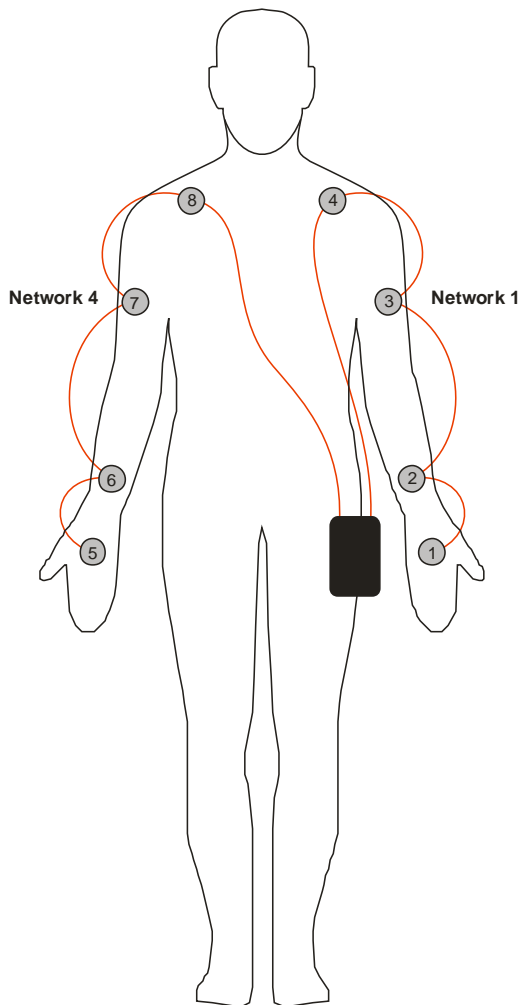


Figure 2: IMUs networks for ports 1 y 4

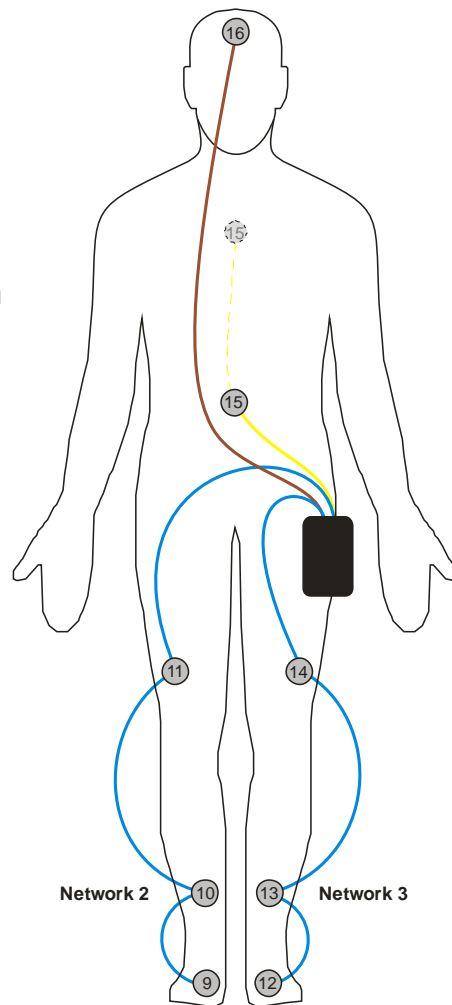


Figure 3: IMUs network for ports 2 y 3

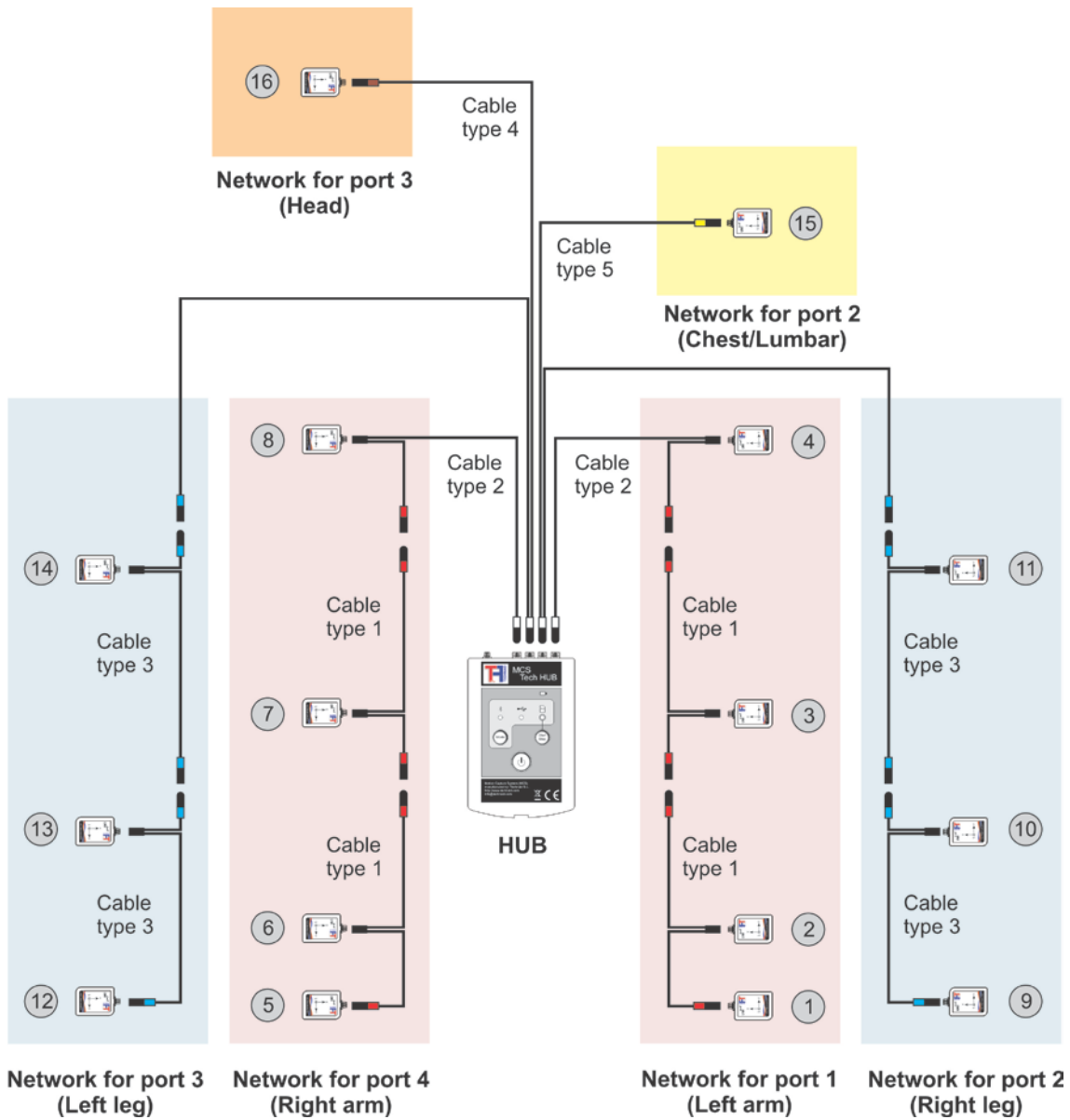


Figure 4: Recommended setup for a 16-IMUs network on the human body.