



Shift Electric Sit Stand Desk

Setup / Operating / Troubleshooting Manual

NOTE: Must be done prior to first use

Intialisation

NOTE: Before INITIALISATION is carried out, the ANTI COLLISION feature is disabled.

Please ensure you remove any objects or items from under the desk frame to avoid any collision whilst the desk is initialising.

Please repeat the below steps in the event of a power interruption.

1. Press & hold the switch until the legs are fully retracted - this is the END STOP position.
Release the switch
2. Immediately press and hold the switch for approx. 6 seconds. The legs will travel out 5mm and then retract back to the END STOP position.
3. It may be necessary to perform the intialisation process twice as the system can be in different modes at start up.
4. The legs are now initialised.
5. Initialisation is also required after a **power interruption** or **relocation of the desk**.

Factory Reset

Factory reset

Pressing and holding the "Memory" and "Reminder" for 8 seconds will set the DPG to factory default. The LED will flash red 3 times. If a factory reset is performed, it sets the DPG back to the configured state. That means all configurations made in the DPG configurator will not be reset – only the settings changed directly on the DPG or in the App by the end-user will be deleted.



Setting memory positions

DPG1C:

Memory positions 1 and 2

The DPG1C has a "store memory" button to the right symbolised with a star.

Adjust the desk to a preferred position and press the "Star"-button for 2 seconds. The light strip will now flash white two times to indicate that saving the position is in progress. When the light strip becomes static white, the position has been saved. The display will indicate the saved position with a star and a number of the position. The number inside the star indicates the order according to which the positions are saved; First position saved; A star with a "1" inside. This is how to save 2 memory positions "1" and "2". If the user adjusts the desk to another position and saves the position, it will overwrite the memory position 1 or 2 closest to the current position.



Memory positions 3 and 4

The DPG1C features 4 memory positions. Pressing the "Star" shortly will make the display show the 4 memory positions: A "star" with the number next to it. Now the user can toggle through these 4 memory positions in the display and choose which one to save the current position as. E.g. a user wants to store the current position as memory 3: Press the "star"-button and toggle to the "star" with "3" next to it. Now use the same storing procedure as described above: Press the star for 2 seconds and the memory position is saved.

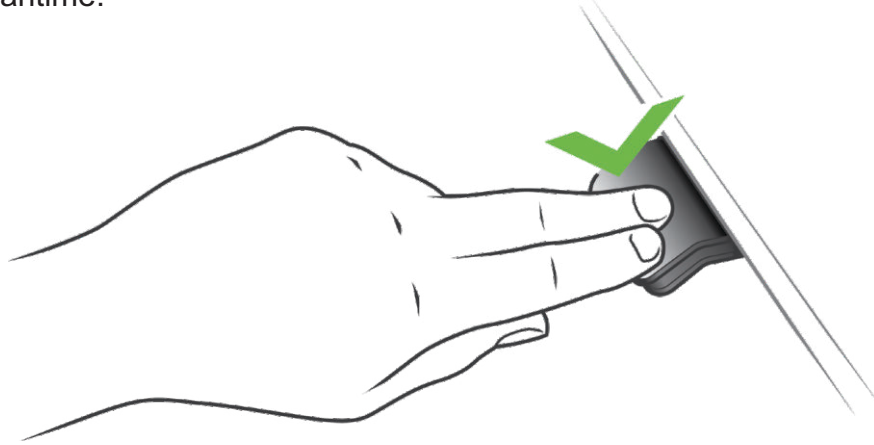


Driving to favourite positions

After Saving the favourite positions, the user can reach the positions simply by tilting/pressing the DPG1M

1. Tilt/press and hold - when a saved position has been reached the desk stops.
2. Release DPG1M within one second

This way the user can easily change between sitting and standing height without looking at the DPG1M in the meantime.



When the desk stops at a favorite position the user can:

- continue to tilt/press the DPG1M for one second

OR

- release the DPG1M and immediately tilt/press it again.

The desk will move past the favourite position and continue its movement.

Automatic driving to favourite positions

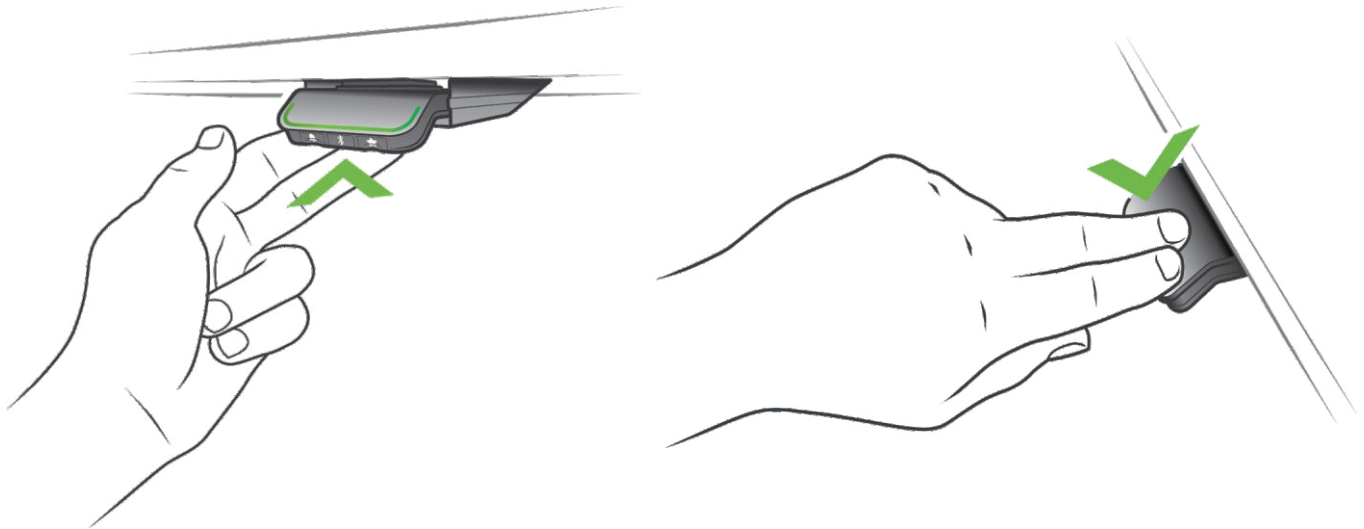


(only possible for “Full version” with “Automatic drive” enabled in the app)

1. Double-tap DPG1M to let desk adjust automatically to first position in direction of double-tap.
 2. Simply tap DPG1M once to stop driving of desk between two favourite positions.
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Operate the desk panel by tilting it.

1. Tilt and hold up DPG to drive desk up, press and hold down DPG to drive desk down
2. Release DPG when you have reached your requested position.



Height settings and lower limits can now be adjusted via the switch with ease



Desk Height limits

In case the desk cannot be operated in its entire span (e.g. a shelf is blocking the upwards movement or filing cabinet is placed under the desk and blocking the downwards movement), it is possible to set an upper limit and a lower limit for the desk height.



Note:

It must always be possible to drive the desk to its minimum height in case initialisation is required. During initialisation items placed under the desk must be removed.

Setting upper limit

1. Adjust the desk to maximum allowable height.
2. Press  and tilt DPG1C up at the same time for 8 seconds until light flashes.
3. Release  and DPG1C.

Setting lower limit

1. Adjust desk to minimum allowable height.
 2. Press  and press DPG1C down at the same time for 8 seconds until light flashes.
 3. Release  and DPG1C.
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TROUBLESHOOTING FOR SERVICE AGENT

Note: Refer to Error Code list for specific description before following the steps below

| Symptom | Possible Reason(s) | What to do |
|---|---|---|
| The desk does not run at all. No movement is observed | <ul style="list-style-type: none">• Malfunctioning desk panel or control box.• Poor Connection• Mains Cable fallen out• No voltage on mains cable | <ul style="list-style-type: none">• Check all connections.• Check that there is voltage in the mains plug.• Connect a desk panel that you know is OK.• If it can run, the desk panel is malfunctioning. If this does not help, the control box is malfunctioning |
| Not all legs operate when you run the desk downwards | <ul style="list-style-type: none">• The leg(s) that do not run are malfunctioning or the cable connection for the leg(s) is not OK | <ul style="list-style-type: none">• Change leg/cable starting with the cable |
| The desk is in the lower position and will not run upwards. You cannot see whether all legs are moving. | <ul style="list-style-type: none">• The desk is overloaded• One or more of the legs has malfunctioned or the cable connection between leg(s) and control box is not OK | <ul style="list-style-type: none">• Remove some of the load on the desk• Remove all motor cables from the control box.• Mount one leg at a time in channel 1, perform initialisation and test a small run upwards.• If a leg will not run upwards after initialisation it is malfunctioning• Try exchanging the motor cable before exchanging the leg |

Error codes for CBD6S troubleshooting:

| Error Code | Name | Description |
|------------|-----------------------------|--|
| 8 | Unexpected Rest | unexpected rest caused by software error or external rest |
| 9 | LIN error | An error occurs on LIN bus |
| 10 | Power fail | A power failure occurred or power regulator adjusted below 10% |
| 11 | Channel count changed | Number of channels connected to the system has changed since last initialization |
| 12 | Position difference | Difference between minimum and maximum position of a reference has been exceeded |
| 13 | Short circuit | Short circuit has been detected while running |
| 14 | Checksum | Position checksum check failed, all channels have position lost |
| 15 | Power limit | The system has reached its power limitation |
| 16 | Key error | Illegal key combination or change of keys |
| 17 | No safety | Safety function has not allowed movement but input active |
| 18 | Missing initialization plug | A special service tool is required to change number of channels to the system |
| 23 | Channel 1 missing | Actuator missing |
| 24 | Channel 2 missing | |
| 25 | Channel 3 missing | |
| 26 | Channel 4 missing | |
| 27 | Channel 5 missing | |
| 28 | Channel 6 missing | |
| 29 | Channel 1 type | Actuator type has changed since initialization, or detected wrong |
| 30 | Channel 2 type | Actuator type has changed since initialization, or detected wrong, or it is not the same as the first actuator |
| 31 | Channel 3 type | |
| 32 | Channel 4 type | |
| 33 | Channel 5 type | |
| 34 | Channel 6 type | |
| 35 | Channel 1 pulse | Too many pulse errors |
| 36 | Channel 2 pulse | |
| 37 | Channel 3 pulse | |

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|----|--------------------------|--|
| 38 | Channel 4 pulse | |
| 39 | Channel 5 pulse | |
| 40 | Channel 6 pulse | |
| 41 | Channel 1 Overload up | Overload occurs outwards |
| 42 | Channel 2 Overload up | |
| 43 | Channel 3 Overload up | |
| 44 | Channel 4 Overload up | |
| 45 | Channel 5 Overload up | |
| 46 | Channel 6 Overload up | |
| 47 | Channel 1 Overload down | Overload occurs inwards |
| 48 | Channel 2 Overload down | |
| 49 | Channel 3 Overload down | |
| 50 | Channel 4 Overload down | |
| 51 | Channel 5 Overload down | |
| 52 | Channel 6 Overload down | |
| 53 | Channel 1 Anti Collision | Anti-Collision limit has been exceeded |
| 54 | Channel 2 Anti Collision | |
| 55 | Channel 3 Anti Collision | |
| 56 | Channel 4 Anti Collision | |
| 57 | Channel 5 Anti Collision | |
| 58 | Channel 6 Anti Collision | |
| 59 | Channel 1 SLS activation | SLS input has been activated |
| 60 | Channel 2 SLS activation | |
| 61 | Channel 3 SLS activation | |
| 62 | Channel 4 SLS activation | |
| 63 | Channel 5 SLS activation | |
| 64 | Channel 6 SLS activation | |
| 65 | Channel 1B type | Type of port B of channel has been changed |
| 66 | Channel 2B type | |
| 67 | Channel 3B type | |
| 68 | Channel 4B type | |
| 69 | Channel 5B type | |
| 70 | Channel 6B type | |
| 71 | Channel 1A shorted | Short circuit detected on output |
| 72 | Channel 1B shorted | |
| 73 | Channel 2A shorted | |
| 74 | Channel 2B shorted | |

| | | |
|----|--------------------|--|
| 75 | Channel 3A shorted | |
| 76 | Channel 3B shorted | |
| 77 | Channel 4A shorted | |
| 78 | Channel 4B shorted | |
| 79 | Channel 5A shorted | |
| 80 | Channel 5B shorted | |
| 81 | Channel 6A shorted | |
| 82 | Channel 6B shorted | |
| 83 | Massage | Massage unit has been disconnected or failed |
| 84 | DC out | DC unit has been disconnected or failed |
| 85 | Radio dead | Radio circuit has died and has had to be restart - ed |
| 86 | Master | Connection to master lost OR following mes - sages are from master |
| 87 | Slave 1 | Connection to 1st slave lost OR following mes - sages are from 1st slave |
| 88 | Slave 2 | Connection to 2nd slave lost OR following mes - sages are from 2nd slave |
| 89 | Slave 3 | Connection to 3rd slave lost OR following mes - sages are from 3rd slave |

| Error number | Error description | Remedy |
|--------------|--------------------------------------|---|
| 93 | <i>DS1 was triggered</i> | Remove any obstacle causing the desk drive to stop and adjust the desk height again. |
| 94 | <i>DS1 can no longer be detected</i> | <ul style="list-style-type: none"> • <i>Check that the DS1 is mounted correctly.</i> • <i>Remove the DS1 and re-insert it.</i> <i>If the DS1 is removed from the system or is no longer mounted correctly, the desk panel will show error 94 at the first activation. At the next activation, however, the desk will drive as intended.</i> |

Method of operation

The DS1 operates on the gyroscope principle detecting tilting of the desk. If the desk starts tilting while driving up or down, the DS1 reacts to an angle change. If the angle change is larger than 0.7° per second, the DS1 immediately stops the desk and drives it in the opposite direction. This return drive automatically continues for maximum 4 seconds (approximately 40 mm). The return drive is independent of the user's interaction with the control but will never run farther than the run causing the collision.

The original angle of the DS1 is updated each time the desk is operated after the control has been in sleep mode (approximately 10 seconds after operation). The gyroscope will allow a slight change in angle (below 0.7° per second), for example if a heavy load is placed on one side of the desk forcing the desk to lean slightly, but if the absolute tilt exceeds 10° compared to the original angle of the DS1, the desk will stop and drive in the opposite direction.

The desk construction may influence the DS1 function:

- On a desk with a very fixed frame, the force required for the desk to tilt is bigger, thus collision (e.g. with soft objects) may not cause the desk to tilt at all.
- On a desk with a very loose frame, the tabletop may tilt easily and cause undesired triggering, even when no collision is actually happening.

The Anti-Collision function is not activated if the collision happens:

- during the initialisation procedure
- within the first 0.8 seconds of desk panel activation (ramp-up time)

The DS1 is very sensitive and may cause false triggering if not mounted correctly. To achieve the best possible performance of the DS1, install the DS1 on the tabletop via either a CBD6S or a T-splitter.




In case of false triggering, please check this list:

- Make sure that the control box or T-splitter is fixed securely to the table.
- Make sure the cables connected next to the DS1 in the control box or T-splitter are fastened thoroughly and **cannot** touch the DS1.
- If the desk is unstable, it may result in false triggering. Make sure the desk is stable and cannot tilt back and forth by adjusting the screws under the feet correctly.
- Make sure that no objects such as cables or furniture under the desk can stop the driving up or down of the desk.
- If none of the above helps:
 - unplug the DS1
 - wait 10 seconds
 - plug the DS1 back in

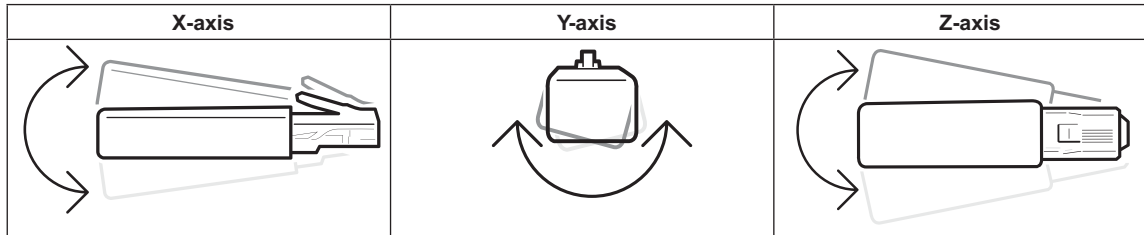



Ds1 ANTI-COLLISION

Installation

-  Ensure that the CBD6S and/or T-splitter are fixed securely to the tabletop for optimal DS1 performance.
-  The DS1 reacts to angle changes from its original position. Thus, the DS1 mounting direction is **not** important.
-  If the DS1 is removed from the system or is no longer mounted correctly, the desk panel will show error 94 at the first activation. At the next activation, however, the desk will drive as intended.

The DS1 can be installed in any direction as tilting is detected in three planes.

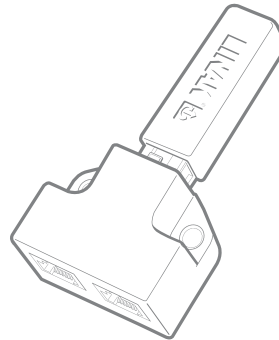



-  Ensure that the cable mounted in port A2 is fastened thoroughly and **cannot** touch the DS1 while the desk is running.

System with IC columns

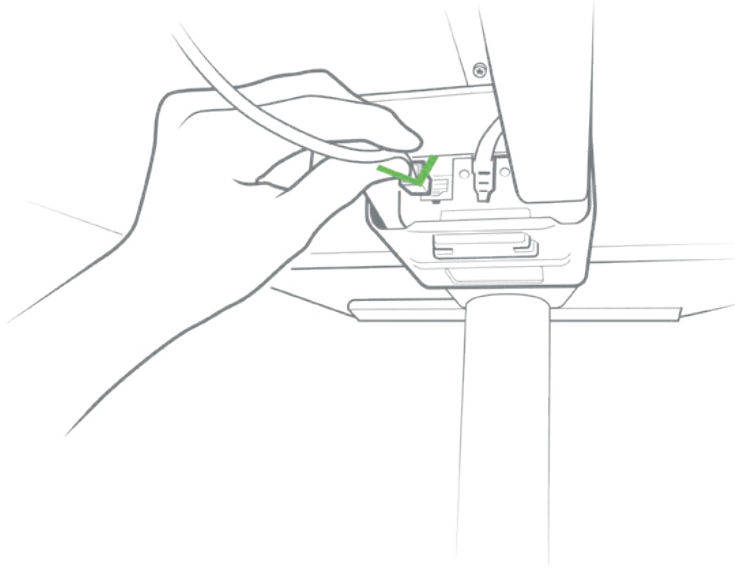
Mount T-splitter on tabletop using two M4.5 x 25 screws.

2. Plug DS1 into port on single-port side of T-splitter.

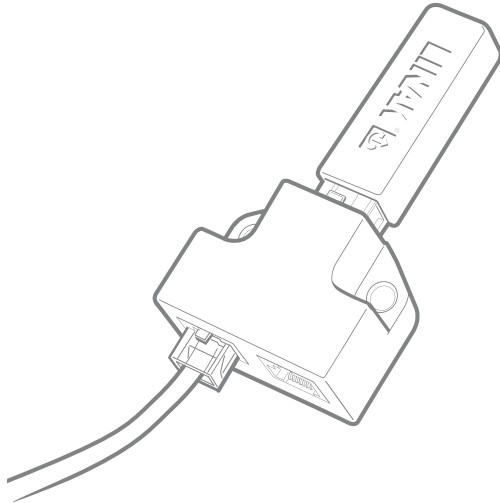


-  Always use the port on the single-port side of the T-splitter for the DS1 to ensure that the DS1 is not undesirably triggered by movement of the serial cable or the cable for the desk panel.

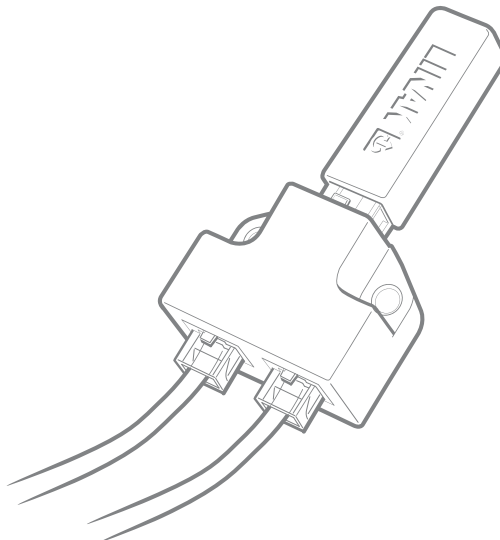
3. Plug serial cable into RJ45 socket on IC column.



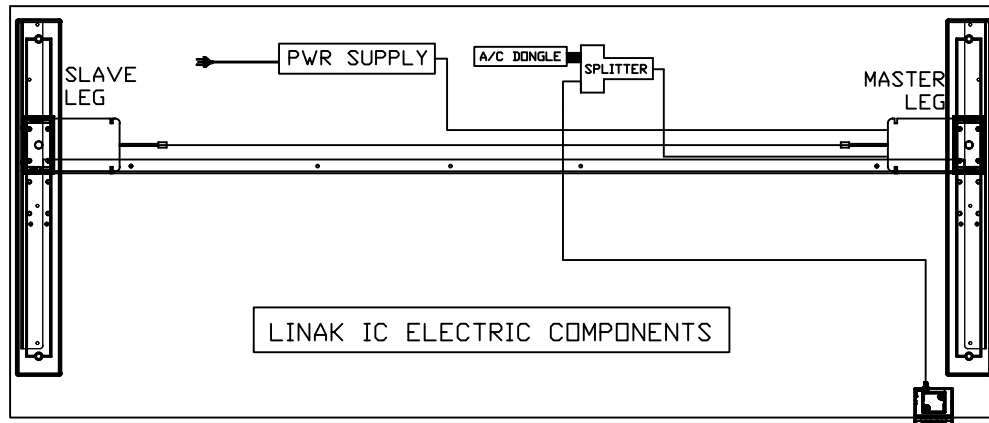
4. Plug serial cable into a port on double-port side of T-splitter.



5. Plug cable for desk panel into the other port on double-port side of T-splitter.



2 LEG FRAMES (1 x MASTER + 1 x SLAVE)

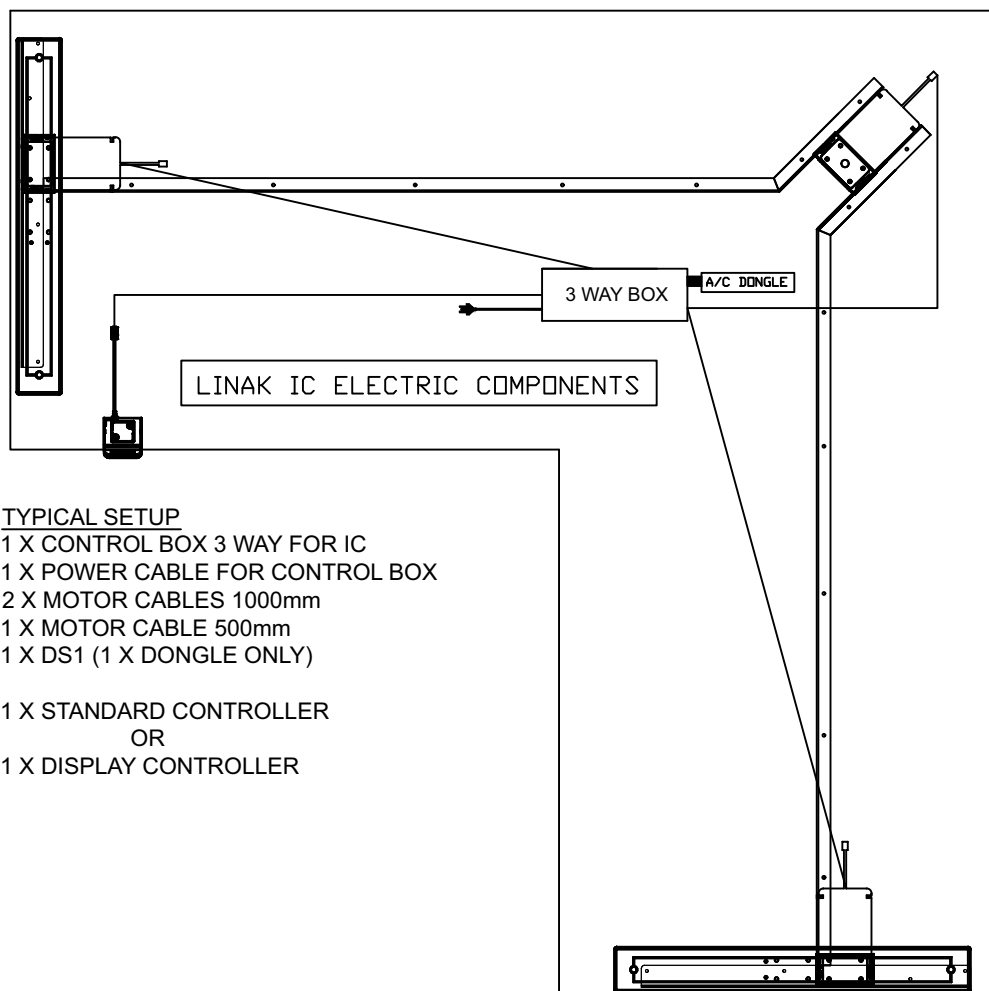


TYPICAL SETUP

- 1 X IC POWER SUPPLY
- 1 X MOUNTING BRACKET FOR IC POWER SUPPLY
- 1 X POWER CABLE FOR IC POWER SUPPLY
- 1 X LEAD - POWER SUPPLY TO MASTER LEG
- 1 X LEAD - MASTER LEG TO SLAVE LEG 2m
- 1 X DS1 KIT FOR IC (1 X DONGLE, 1 X SPLITTER, 1 X LEAD)

- 1 X STANDARD CONTROLLER
- OR
- 1 X DISPLAY CONTROLLER

3 LEG FRAMES (3 x SLAVES)



TYPICAL SETUP

- 1 X CONTROL BOX 3 WAY FOR IC
- 1 X POWER CABLE FOR CONTROL BOX
- 2 X MOTOR CABLES 1000mm
- 1 X MOTOR CABLE 500mm
- 1 X DS1 (1 X DONGLE ONLY)

- 1 X STANDARD CONTROLLER
- OR
- 1 X DISPLAY CONTROLLER