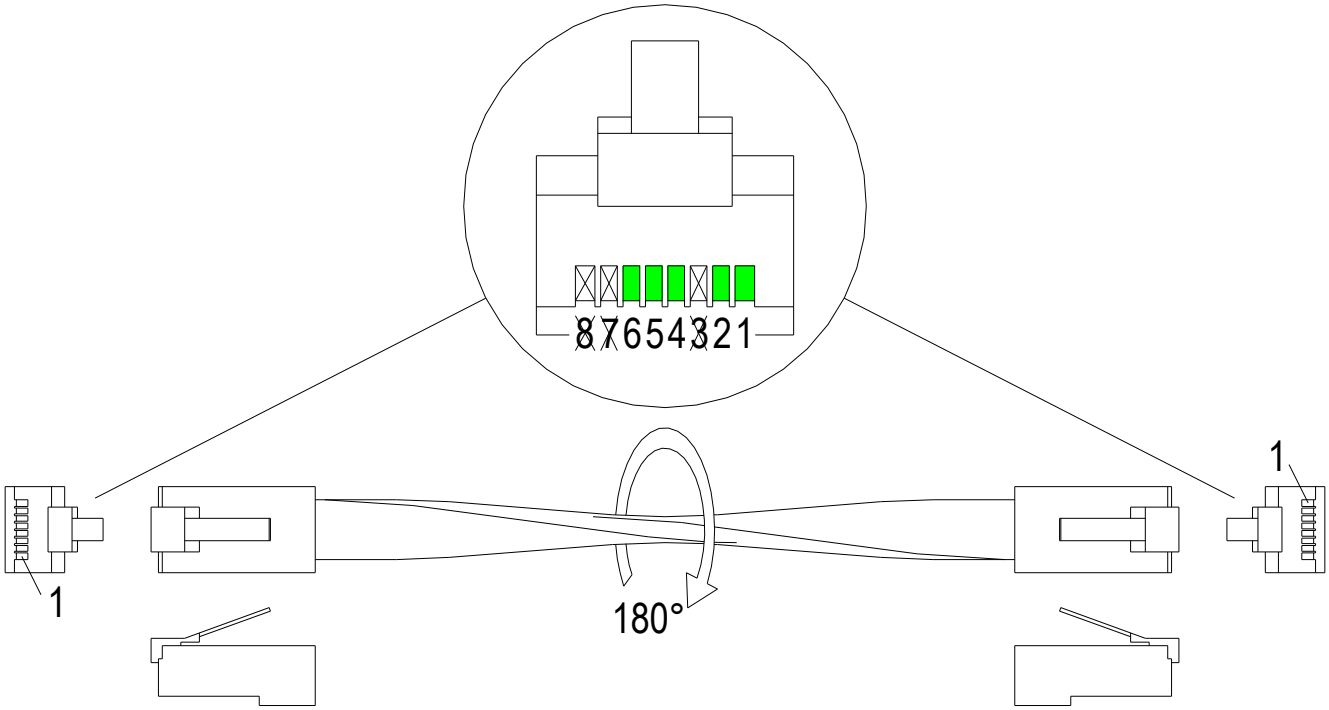
Connecting to HB-508S*

Option 1 – Communication cable modification (recommended)

Between any HB-508S and HB-510



When connecting an HB-510 to an HB-508S (upstream or downstream) a special cable is recommended. This modification can be easily performed when making the communication cable. Simply disable (or cut) PINs 3, 7, and 8 according to the above diagram on the communication cable.

PIN 3 is the SPEED Variation Signal for both the HB-508S and the HB-510. However, the initial signal voltage is 0V for the HB-510. Which, when connected to an HB-508S, pulls the speed signal low and affects the HB-508S roller speed. If this connection is not disabled, the HB-508S will operate at a slower speed.

PIN 7 is the DIR (direction) Signal for both the HB-508S and the HB-510. However, due to differing voltage levels, an HB-508S will pull the DIR signal low and affect the HB-510's roller direction.

PIN 8 is the E-STOP Signal for the HB-510, but it is the GND for the HB-508S. The GND (0V) will pull the ESTOP signal low and stop HB-510 operation.

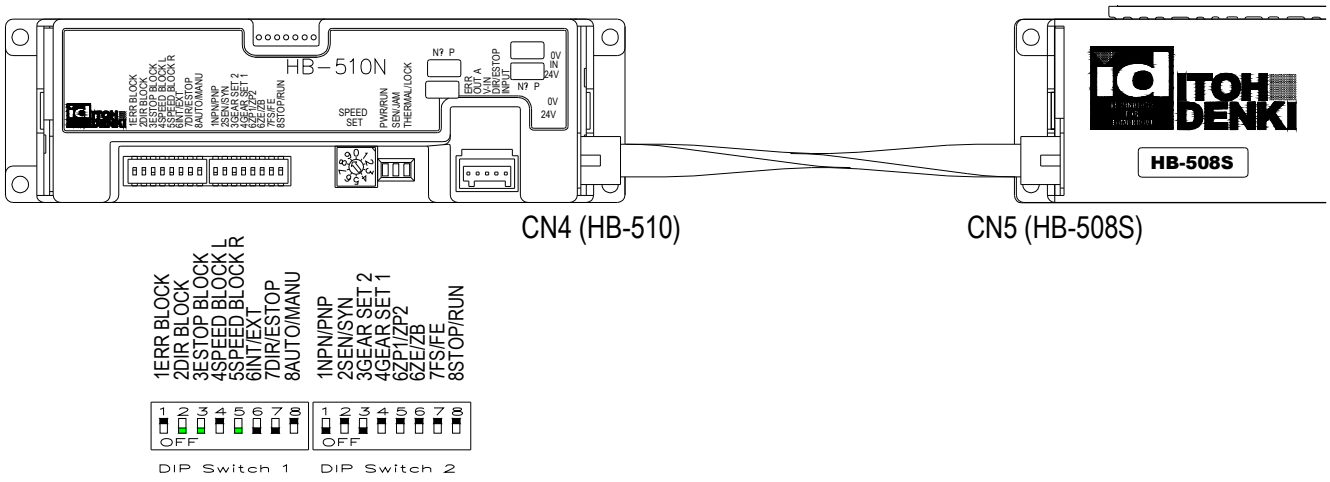
*** Regardless of the method used to connect the HB-510 to the HB-508S, there will always be a break in the SPEED and DIR signal communication between these two models. Therefore if external speed or direction control is necessary, those signals will need to be repeated at the point(s) of the break(s).**

Communication cable PIN assignment DOES NOT follow Ethernet PIN order

Specifications subject to change without notice

Option 2 – HB-508S CN5 to HB-510 CN4 (modified cable not necessary)

HB-510 downstream from HB-508S in standard orientation
This is not necessary if a modified communication cable (option 1) is used.



The cards are in standard orientation.

When connecting an HB-510 from **CN4** to **CN5** of an HB-508S, DIP Switch settings must be set to ensure compatibility.

DIP Switch 1-2 DIR BLOCK must be OFF. This will prevent the communication of the direction signal to/from CN4 on the HB-510. If not set, this signal will be pulled low and thus activated due to the signal voltage level difference of the HB-508S.

DIP Switch 1-3 E-STOP BLOCK must be OFF. This will prevent the communication of the E-STOP signal to/from CN4 on the HB-510. If not set, this signal will be pulled low and thus activated due to the 0V present from the HB-508S GND connection.

DIP Switch 1-5 SPEED BLOCK R must be OFF. This will prevent the communication of the SPEED signal to/from CN4 on the HB-510. If not set, this signal will pull the speed signal in the HB-508S low and thus prevent the HB-508S to run at full speed.

Attention:
Option 2 or 3 may be used when connecting a chain of HB-508S cards to a chain of HB-510 cards. However, if an HB-510 card(s) is in between a chain of HB-508S cards, both Option 2 & 3 must be used. Because this may lead to confusion as to DIP switch settings and cable configuration, Option 1 is strongly recommended for all cases.

Communication cable PIN assignment DOES NOT follow Ethernet PIN order

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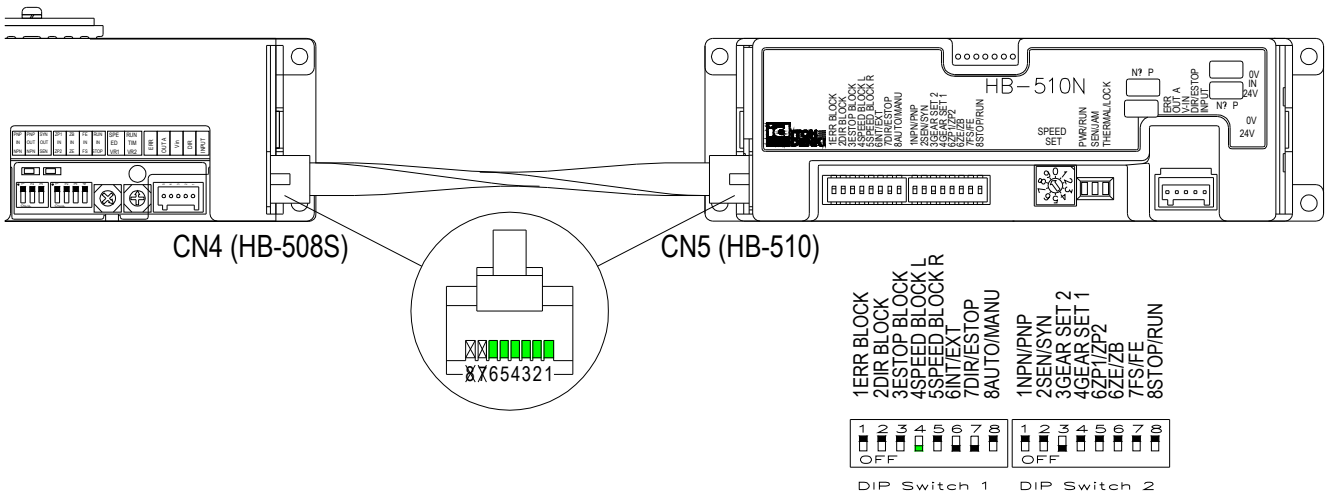
Option 3 – HB-510 CN5 to HB-50S CN4 (partially modified cable necessary)

HB-508S downstream from HB-510 in standard orientation
This is not necessary if a modified communication cable (option 1) is used.



When connecting an HB-508S from **CN4** to **CN5** of an HB-510, DIP Switch settings must be set to ensure compatibility.

DIP Switch 1-4 SPEED BLOCK L must be OFF. This will prevent the communication of the SPEED signal to/from CN5 on the HB-510. If not set, this signal will pull the speed signal in the HB-508S low and thus prevent the HB-508S to run at full speed.

PIN 7 (DIR) on the communication cable must be removed. This will prevent the communication of the DIR signal to/from CN5 on the HB-510. If not removed, this signal will be pulled low and thus activated due to the signal voltage level difference of the HB-508S.

PIN 8 (E-STOP)on the communication cable must be removed. This will prevent the communication of the E-STOP signal to/from CN5 on the HB-510. If not removed, this signal will be pulled low and thus activated due to the 0V present from the HB-508S GND connection.

Attention:
Option 2 or 3 may be used when connecting a chain of HB-508S cards to a chain of HB-510 cards. However, if an HB-510 card(s) is in between a chain of HB-508S cards, both Option 2 & 3 must be used. Because this may lead to confusion as to DIP switch settings and cable configuration, Option 1 is strongly recommended for all cases.

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