UC4.5™ Spray Height Control System

UC4.5 Cable Ordering Guide
## Contents

1. Introduction ................................................................................................................ 1
2. General UC4.5 System Layout ................................................................................. 2
3. Typical UC4.5 Height Control System .................................................................... 4
4. Cable Connection Guide ........................................................................................... 5
5. Basic Cables ................................................................................................................ 7
6. Item C12: Valve Interface Cables ......................................................................... 10
8. Item C16: Roll Bias Interface Cables ..................................................................... 35
9. Item C17: Valve Cables .......................................................................................... 44
10. Item C18: Miscellaneous Interface Cables ............................................................ 50
11. Item C30: Battery Cables ....................................................................................... 54
12. Network Cables ....................................................................................................... 59
13. Network Couplers, Plugs & Terminators ............................................................. 61
14. Extension Cables ...................................................................................................... 65
15. Sprayer Specific Main Power Cables ..................................................................... 67
16. Sprayer Specific Valve Extension Cables .............................................................. 77
17. Specialty Interface Cables ....................................................................................... 80
Introduction

This UC4.5 Cable Ordering Guide illustrates the available cables for the UC4.5 system. Please take the time to read this list to determine necessary cables for your UC4.5 Height Control System.

Your input can help make us better! If you find issues or have suggestions please don’t hesitate to contact us.

⚠️ Important

Every effort has been made to ensure the accuracy of the information contained in this document. All parts supplied are selected to specially fit the sprayer to facilitate a complete installation. However, NORAC cannot guarantee all parts fit as intended due to the variations of the sprayer by the manufacturer.
2 General UC4.5 System Layout

Figure 1, Figure 2 and Figure 3 illustrate the general layout of the UC4.5 system components:

Figure 1: General UC4.5 System Layout (Self Propel Type)

Figure 2: General UC4.5 System Layout (Pull Type)
Figure 3: General UC4.5 System Layout (Front Mount)
3 Typical UC4.5 Height Control System

Figure 4 depicts a typical UC4.5 Height Control System. The various cables are listed in this ordering guide. To choose the most suitable cables, refer to the UC4.5 installation manual, the sprayer's valve connections and the electrical wiring system.
## 4 Cable Connection Guide

The following table shows the cables that are required for the main connections in the UC4.5 system. Refer to Figure 4 for the location of each cable by item number.

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
<th>Description</th>
<th>Available Lengths</th>
<th>Typical Length</th>
<th>Quantity Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>C05</td>
<td>43210-XX</td>
<td>Wing Sensor to 8-way Coupler: UC5 Network Cable 18 AWG</td>
<td>10, 15, 20 m</td>
<td>20 m</td>
<td>2</td>
</tr>
<tr>
<td>C03</td>
<td>44656D</td>
<td>NORAC Valve Block to Valve Extension Cable: NORAC Valve Cable</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C10</td>
<td>44650-50</td>
<td>Control Panel to Valve Extension Cable: Main Power Cable</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>44650-51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C11</td>
<td>44651-50</td>
<td>Main Power Cable to 8-Way Coupler and Interface Cables: Valve Extension Cable</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C12</td>
<td>Various</td>
<td>Valve Extension Cable to Sprayer Valve Block: Valve Interface Cable</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C13</td>
<td>Various</td>
<td>Valve Extension Cable to Sprayer Valve Block: Bypass/Remote Manual Interface Cable (This cable is not always required)</td>
<td>Various</td>
<td>1.5 m</td>
<td>1</td>
</tr>
<tr>
<td>C16</td>
<td>Various</td>
<td>Valve Extension Cable to Sprayer Valve Block: Roll Bias Interface Cable (This cable is not always required)</td>
<td>Various</td>
<td>1.5 m</td>
<td>1</td>
</tr>
<tr>
<td>C17</td>
<td>Various</td>
<td>Valve Extension Cable to Sprayer Valve Block: Valve Cable (This cable is not always required) (Not Shown)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C18</td>
<td>Various</td>
<td>Valve Extension Cable to Sprayer Valve Block: Miscellaneous Interface Cable (This cable is not always required) (Not Shown)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>C30</td>
<td>Various</td>
<td>Main Power Cable to Sprayer Power: Battery Cable</td>
<td>Various</td>
<td>1.5 m</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1 and Table 2 describe possible connections between the interface cables and connectors of the main power cable (C10) (Table 1) and the valve extension cable (C11) (Table 2).
### Table 1: Main Power Cable (C10) #44650-50/51 Connection Guide

<table>
<thead>
<tr>
<th>Connector Name</th>
<th>Designated Connection Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>P4</td>
<td>UC4.5 Control Panel – R4 (CAN Communication)</td>
</tr>
<tr>
<td>P16</td>
<td>UC4.5 Control Panel – R16 (Power Supply &amp; Valve Control)</td>
</tr>
<tr>
<td>P6A</td>
<td>Item C30 (with Item E12) – Power Cable</td>
</tr>
<tr>
<td>P12 &amp; P6B</td>
<td>Item C11 – Valve Extension Cable</td>
</tr>
</tbody>
</table>

### Table 2: Valve Extension Cable (C11) #44651-50 Connection Guide

<table>
<thead>
<tr>
<th>Connector Name</th>
<th>Designated Connection Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>R12/R6</td>
<td>Item 10 – Main Power Cable</td>
</tr>
<tr>
<td>P6</td>
<td>Item E11 – 8-way Coupler</td>
</tr>
<tr>
<td>S6</td>
<td>Item C03 – Valve Cable (NORAC Valve)</td>
</tr>
<tr>
<td>T6</td>
<td>Item C12 – Valve Interface Cable</td>
</tr>
<tr>
<td>T3</td>
<td>Item C13 – Bypass/Remote Manual Interface Cable</td>
</tr>
<tr>
<td>S3</td>
<td>Item C16 – Roll Bias Interface Cable</td>
</tr>
<tr>
<td>Multiple</td>
<td>Item C17 – Valve Cable</td>
</tr>
</tbody>
</table>
5 Basic Cables

5.1 Item C10: Cable UC4.5 Power Generic

Part Number: 44650-50 (Rev A)  Self-Propelled Type  L = 100" (2.54m)
Part Number: 44650-51 (Rev A)  Pull Type  L = 240" (6.10m)
5.2 Item C11: 44651-50 (Rev A) - Cable UC4.5 Extension Valve
Generic

L = 380” (9.65m)  Connect to #44650-50 P12/P6B / #44650-51 P12/P6B
5.3 Item C03: 44656D (Rev A) - Cable UC4 Valve Variable Rate DT

L = 48” (1.22m) Connect to 44651-50 S6
6 Item C12: Valve Interface Cables

6.1 44658-18 (Rev A) – Cable UC4 Valve AP2 Main

L = 138” (3.51m)  

Connect to 44651-50 T6
6.2  44658-19 (Rev B) – Cable UC4 Interface FT1 Main

L = 30” (0.76m)  
Connect to 44651-50 T6
6.3 44658-21 (Rev A) – Cable UC4 Interface GP All

L = 72” (1.83m)  

Connect to 44651-50 T6
6.4  44658-24 – Cable UC4 Interface DT06-2X GND2

L = 72” (1.83m)  

Connect to 44651-50 T6
6.5 44658-32 (Rev A) – Cable UC4 Interface Rogator 854,1054,1254

L = 72" (1.83m) Connect to 44651-50 T6
6.6  44658-35 – Cable UC4 Interface Generic

L = 72” (1.83m)  Connect to 44651-50 T6
6.7 44658-37 – Cable UC4 Interface Main Generic

L = 18” (0.46m)  Connect to 44651-50 T6
6.8  44658-38 (Rev A) – Cable UC4 Interface DIN All

L = 72" (1.83m)  

Connect to 44651-50 T6
6.9  44658-42 (Rev A) – Cable UC4 Interface AMP ML Only

L = 216” (5.49m)  Connect to 44651-50 T6
6.10 44658-89 (Rev B) – Cable UC4 Interface GP (Reversed Polarity)

L = 72" (1.83m) Connect to 44651-50 T6
6.11  44658-91 (Rev B) – Cable UC4 Valve AP3 Main

L = 138” (3.51m)   Connect to 44651-50 T6

S6

MAIN UP  WHT  2
MAIN DOWN  ELK  3

P2A

WHT  6
GRN  7

R2A

WHT  4
GRN  5

P2B

ELK  8
GRN  9

R2B

MAIN UP

MAIN DOWN
6.12 44658-97 (Rev A) – Cable UC4 Interface DT06-2X GND2 - Diode

L = 72" (1.83m) Connect to 44651-50 T6
6.13 44658-100 (Rev A) – Cable UC4 Interface Superseal All

L = 72" (1.83m)  
Connect to 44651-50 T6
6.14 44658-103 (Rev A) – Cable UC4.5 Montana Main Lift

L = 138” (3.51m)  
Connect to 44651-50 T6
Item C13: Bypass Valve/Remote Manual Interface Cables

7.1 44658-17 (Rev A) - Cable UC4 Sense AP2

L = 12” (0.30m)  
Connect to 44651-50 T3
7.2  44658-20 - Cable UC4 Interface FT1 Wings

L = 30" (0.76m)  Connect to 44651-50 T3
7.3  44658-27 (Rev A) - Cable UC4 Interface DT2 GND2 Bypass

L = 72” (1.83m)  

Connect to 44651-50 T3

7.4  44658-33 (Rev A) - Cable UC4 Interface MP2 GND2 Bypass

L = 72” (1.83m)  

Connect to 44651-50 T3
7.5  44658-34 (Rev A) - Cable UC4 Interface Bypass GP2

L = 72” (1.83m)  

Connect to 44651-50 T3
7.6  44658-36 - Cable UC4 Interface Wings Generic

L = 18" (0.46m)  

Connect to 44651-50 T3
7.7  44658-39 (Rev A) - Cable UC4 Interface DIN

L = 72" (1.83m)  
Connect to 44651-50 T3

7.8  44658-54 (Rev F) - Cable UC4 Interface MP2 RMAN Long

L = 288" (7.32m)  
Connect to 44651-50 T3
7.9  44658-60 (Rev C) - Cable UC4 Interface Bypass AMP Superseal

L = 300" (7.62m)  Connect to 44651-50 T3

7.10  44658-70 (Rev B) - Cable UC4 Interface Remote Manual DT

L = 72" (1.83m)  Connect to 44651-50 T3
7.11 44658-74 (Rev A) - Cable UC4 Interface Deutsch Bypass

L = 72” (1.83m) Connect to 44651-50 T3
7.12 44658-87 (Rev B) - Cable UC4 Interface RM JD 4630

L = 30" (0.76m) Connect to 44651-50 T3
7.13 44658-90 (Rev B) - Cable UC4 Sense AP3

L = 12" (0.30m) Connect to 44651-50 T3

Diagram showing the connections and labeling of the cable.
7.14 44658-102 (Rev A) - Cable UC4 Interface DT2 GND2 Bypass w Diodes

L = 72" (1.83m)  Connect to 44651-50 T3
8.1 44658-46D (Rev C) – Cable UC4 Valve DT Roll With Pigtail

L = 72" (1.83m)  

Connect to 44651-50 S3
8.2  44658-49 – Cable UC4 Valve Roll Pigtail

L = 180” (4.57m)  

Connect to 44651-50 S3
8.3  44658-69 (Rev B) - Cable UC4 Interface Roll DT

L = 36” (0.91m)  

Connect to 44651-50 S3
8.4 44658-72 (Rev B) - Cable UC4 Interface Roll Sense DT

L = 36” (0.91m) Connect to 44651-50 S3
8.5  44658-94 (Rev B) - Cable UC4 Valve Roll - DIN

L = 180” (4.57m)  Connect to 44651-50 S3
8.6  44658-95 (Rev B) - Cable UC4 Valve Roll - DT

L = 180” (4.57m)

Connect to 44651-50 S3
8.7 44658-96 (Rev A) - Cable UC4 Valve Roll – Weatherpack

L = 180” (4.57m)  
Connect to 44651-50 S3
8.8 44658-104 (Rev A) - Cable UC4.5 Tilt Superseal

L = 36" (0.91m)  

Connect to 44651-50 S3
8.9 44658-110 (Rev A) - Cable UC4 Interface Roll Sense - DIN

L = 36" (0.91m)  Connect to 44651-50 S3
9.1 44658-45D (Rev B) - Cable UC4 Valve Main DT

L = 72” (1.83m) Connect to 44651-50 T6 and S3
9.2 44658-58 (Rev B) - Cable UC4 Interface RAU I/O 1

L = 24" (0.61m)  

Connect to 44651-50 T6, T3 and S3

---

P12

S3

L = 24" (0.61m) Connect to 44651-50 T6, T3 and S3
9.3  44658-62 (Rev A) – Cable UC4 Interface Valve CS4

L = 6” (0.15m) Connect to 44651-50 T6 and T3
9.4  44658-106 (Rev B) – Cable UC4 Interface Main and Bypass

L = 115" (2.92m)  

Connect to 44651-50 T6 and T3
9.5  44658-108 (Rev A) – Cable UC4 Interface Main and Bypass DIN

L = 54" (1.37m)  

Connect to 44651-50 T6 and T3
9.6  44658-109 (Rev A) – Cable UC4 Interface Main and Bypass AMP Superseal

L = 54” (1.37m)  
Connect to 44651-50 T6 and T3
10 Item C18: Miscellaneous Interface Cables

10.1 44658-40 (Rev A) – Cable UC4 Interface GP Main Extension

L = 180” (4.57m) Connect to Cable C12
10.2  44658-47 (Rev A) – Cable UC4 Interface DT2 Main Extension

L = 180” (4.57m)  

Connect to Cable C12
10.3 44658-59 (Rev C) – Cable UC4 Interface RAU I/O 2

L = 36" (0.91m)  Connect to RAU PCB

Diagram showing the connection points for various valves and ground connections.
10.4 44658-61 (Rev D) – Cable UC4 Interface RAU Bypass

L = 350” (8.89m)  

Connect to 44658-59

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Diagram showing the connection between two ports labeled DM1 and DF1 with terminals 1, 2, 3, and N/C.
11  Item C30: Battery Cables

All battery cables are 60” (1.5m) in length unless otherwise noted. All connect to 44650-50 or 44650-51 P6A using a 2-way coupler (Item E12).

11.1  43250-04 (Rev C) – Cable UC5 Battery AMP Fused

11.2  43250-06 (Rev C) – Cable UC5 Battery Pigtail Fused
11.3 43250-07 (Rev C) – Cable UC5 Battery JD Fused

11.4 43250-08 (Rev C) – Cable UC5 Battery AMP Tee Fused
11.6 43250-14 (Rev C) - Cable UC5 Battery 2-Pin DT Fused (ECU & SIG)

11.7 43250-16 (Rev C) - Cable UC5 Battery 6-Pin DT Fused (ECU & SIG)
11.8  43250-18 (Rev A) - Cable UC5 Battery Fused (ECU & SIG)
12 Network Cables

12.1 43210-XX (Rev A) - Cable UC5 Network 18 AWG

The “XX” in the part number denotes the cable length. Replace it with the cable length required. Cables are available in: 10, 15 and 20 meter lengths (395”, 595” and 780”).

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**Diagram**

- P6A
- P6B

- ECU GND
- SIG GND
- CANL
- CANH
- SIG PWR
- ECU PWR

<table>
<thead>
<tr>
<th></th>
<th>P6A</th>
<th></th>
<th>P6B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECU GND</td>
<td>BLK</td>
<td></td>
<td>ECU GND</td>
<td></td>
</tr>
<tr>
<td>SIG GND</td>
<td>BLK/WHT</td>
<td></td>
<td>SIG GND</td>
<td></td>
</tr>
<tr>
<td>CANL</td>
<td>YEL</td>
<td></td>
<td>CANL</td>
<td></td>
</tr>
<tr>
<td>CANH</td>
<td>GRN</td>
<td></td>
<td>CANH</td>
<td></td>
</tr>
<tr>
<td>SIG PWR</td>
<td>RED/WHT</td>
<td></td>
<td>SIG PWR</td>
<td></td>
</tr>
<tr>
<td>ECU PWR</td>
<td>RED</td>
<td></td>
<td>ECU PWR</td>
<td></td>
</tr>
</tbody>
</table>
12.2  43220-XX (Rev A) - Cable UC5 Network 14 AWG

The “XX” in the part number denotes the cable length. Replace it with the cable length required. Cables are available in: 0.5, 1, 3, 5, 7, 10, 15 and 20 meter lengths (20”, 40”, 120”, 200”, 275”, 395”, 595” and 780”).

![Diagram of cable connections]
13 Network Couplers, Plugs & Terminators

13.1 Item E10: 43760 (Rev C) – UC5 Network Coupler 3-Way
13.2 Item E11: 43765 (Rev A) – UC5 Network Coupler 8-Way
13.3 Item E12: 43764 (Rev B) – UC5 Network Coupler 2-Way

13.4 Item E20: 43764T (Rev B) – UC5 Network Coupler 2-Way with Terminator
13.5 Item P01: 106034 – UC5 Network 2 Pin Plug

13.6 Item P03: 105882 – UC5 Network 6 Pin Plug

13.7 44782 – GP Tower Plug 6 Way

13.8 44783 – GP Tower Plug 3 Way
14 Extension Cables

14.1 Item C04: 44651 - Cable Valve Extension

L = 360" (9.14m) Connect to Cable C10 T6

14.2 Item C01: 44653-10 (Rev-A) - Cable UC4.5 Adapter Molex to Deutsch

L = 15" (0.38m) Connect to UC4.5 Control Panel
14.3 44688 (Rev-A) - Cable Valve Disconnect Extension 4ft

L = 50” (1.27m)
15 Sprayer Specific Main Power Cables

15.1 44650-52 (Rev A) - Cable UC4.5 Power HARDI

L = 243" (6.17m) Connect to UC4.5 Control Panel
15.2 44650-53 (Rev A) - Cable UC4.5 Power for Flexi-Coil 67 Series

L = 168" (4.27m)  

Connect to UC4.5 Control Panel
15.3  44650-54 (Rev A) - Cable UC4.5 Power HARDI PT

L = 168" (4.27m)  Connect to UC4.5 Control Panel
15.4  44650-55 (Rev A) - Cable UC4.5 Power Hagie STS12

L = 180" (4.57m)  
Connect to UC4.5 Control Panel
15.5 44650-56 (Rev A) - Cable UC4.5 Power Hagie 2101/2100

L = 180" (4.57m) Connect to UC4.5 Control Panel
15.6  44650-57 (Rev A) - Cable UC4.5 Power John Deere

L = 84" (2.13m) Connect to UC4.5 Control Panel
15.7  44650-58 (Rev A) - Cable UC4.5 Power Nitro

L = 132" (3.35m)  
Connect to UC4.5 Control Panel
15.8  44650-59 (Rev A) - Cable UC4.5 Power Spra Coupe 7000 Series

**Cable A:** 72" (1.83m))  
Connect to Cable B
**Cable B:**  
L = 84" (2.13m)  
Connect to UC4.5 Control Panel
15.9  44650-60 (Rev A) - Cable UC4.5 Interface Spra Coupe

L = 304" (7.72m) Connect to UC4.5 Control Panel
16 Sprayer Specific Valve Extension Cables

16.1 44651-51 (Rev A) - Cable UC4.5 Extension Valve HARDI

L = 360” (9.14m)  

Connect to 44650-52
16.2 44651-52 (Rev A) - Cable UC4.5 Valve Extension Nitro 4000 Series

L = 360" (9.14m) Connect to Cable C10
16.3 44651-53 (Rev A) - Cable UC4.5 Extension Nitro 4000 Series

L = 360” (9.14m)  

Connect to 44651-52
17 Specialty Interface Cables

17.1 44658-01 (Rev B) - Cable UC4 Valve BC JD

L = 60" (1.5m)  Connect to Cable C10 S6
17.2 44658-08D (Rev C) - Cable UC4 Valve Roll Bias DT

L = 324" (8.23m)  

Connect to 44650-57 T2
17.3 44658-10 (Rev A) - Cable UC4 Valve BC JD4920

L = 36" (0.91m)  

Connect to Cable C10 S6
17.4 44658-15 (Rev A) - Cable UC4 Jam Valve Spra Coupe 7000 Series

L = 216" (5.49m)  

Connect to 44650-59 T2
17.5 44658-51 (Rev B) - Cable UC4 Interface HARDI

L = 30" (0.76m)  
Connect to 44651-51 T6 and T4
L = 40" (1.0m) Connect to 44651-51 T6, S6 and T4
L = 24” (0.61m) Connect to Cable C10 S6 and S3
17.8  44658-105 (Rev A) - Cable UC4.5 Interface Delta Demo

L = 24" (0.61m)  
Connect to Cable C10 S6
L = 24" (0.61m) Connect to Cable C10 S6