

RMC200 U14 Cables

R2-CB-U14TB1-nnA R2-CB-U14TB2-nnA Installation and Wiring

Pigtail cables provide a compact, convenient option for RMC200 modules. These cables are for short distances between the RMC200 and terminal blocks within the same cabinet. For long cable runs, Delta recommends using cables with lower resistance and better shielding.

Supplied Components

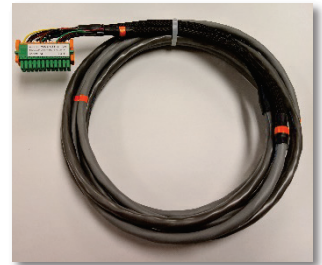
The U14 module requires ordering two different cable assemblies:

- R2-CB-U14TB1-nnA
- R2-CB-U14TB2-nnA

nn denotes the length: 06 = 6 ft. (1.83 m);
12 = 12 ft. (3.66 m); contact Delta for other lengths.

Each cable assembly consists of:

- One terminal block connector
- Two or three cables, each wired to the single terminal block connector
- Flexible cable leader
- Pigtail ends



R2-CB-U14TB1-06A



R2-CB-U14TB2-06A

Cable specifications:

Assembly:	R2-CB-U14TB1-nnA		R2-CB-U14TB2-nnA	
Cable (or equiv.)	Belden 8778	Belden 8777	Belden 1421A	Alpha 2214C
Cable Quantity	1	1	2	1
Outer Diameter	0.352 in.	0.273 in.	0.280 in.	0.266 in.
Min bend radius	3.75 in.	2.75 in.	2.8 in.	2.7 in.
Conductors	6 twisted pairs	3 twisted pairs	4 twisted pairs	4 twisted pairs
Gauge	22 AWG, stranded	22 AWG, stranded	24 AWG, stranded	22 AWG, stranded
Shielding	Individual foil per pair	Individual foil per pair	Overall foil shield	Overall foil shield
Impedance	50 Ohms	50 Ohms	100 Ohms	59 Ohms
Capacitance	30 pf/ft	30 pf/ft	13 pf/ft	38 pf/ft
Resistance	15 Ohms/1000 ft	15 Ohms/1000 ft	24 Ohms/1000 ft	16.5 Ohms/1000 ft
Jacket	PVC, -20 to 80 °C	PVC, -20 to 80 °C	PVC, -20 to 80 °C	PVC, -20 to 80 °C

U14 Cables Wiring Notes

- The analog inputs share the same common potential and all sensor commons must be tied together at some point.
- The analog outputs share the same common potential and all valve/drive commons must be tied together at some point.
- The SSI/MDT/Quad inputs (including Reg/Z inputs) share the same common potential. See RMCTools Help for wiring and configuration.
- The shields from each of the individual sensor/encoder/drive cables should be terminated at the separate terminal blocks with a low impedance connection to ground.
- Delta recommends the use of ferrules with these cables.

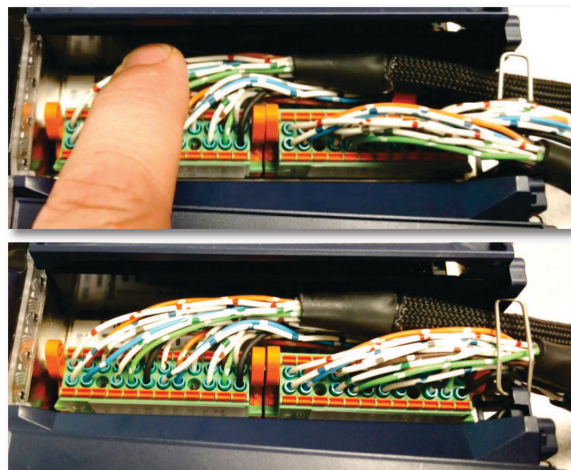
U14 Cables Pin-out

TB1 Cbl A: Anlg In 0-3			TB1 Cable B: Anlg Out 0-1			TB2 Cbl A: SSI/MDT/Quad, DI/O			TB2 Cable B: Din 20-23			TB2 Cable C: Din 20-23		
Color Pairs	Pin		Color Pairs	Pin		Color Pairs	Pin		Color Pairs	Pin		Color Pairs	Pin	
Red/Black	A In0+		Red/Black	A Out0+		Wht w/ Blu	Clk0/A0+		Wht w/ Blu	Clk0/A1+		Red/Black	D0+	
Black/Black	A In0-		Black/Black	A Out0-		Blu w/ Wht	Clk0/A0-		Blu w/ Wht	Clk0/A1-		Black/Black	D0-	
White/Black	A In1+		White/Black	A Out1+		Wht w/ Org	Dat0/B0+		Wht w/ Org	Dat0/B1+		White/Black	D1+	
Black/Black	A In1-		Black/Black	A Out1-		Org w/ Wht	Dat0/B0-		Org w/ Wht	Dat0/B1-		Black/Black	D1-	
Green/Black	A In2+		Green/Black	Cmn		Wht w/ Grn	Reg/Z0+		Wht w/ Grn	Reg/Z1+		Green/Black	D2+	
Black/Black	A In2-		Black/Black	Cmn		Grn w/ Wht	Reg/Z0-		Grn w/ Wht	Reg/Z1-		Black/Black	D2-	
Blue/Black	A In3+		Orange band			Wht w/ Gry	Cmn		Wht w/ Gry	Cmn		Blue/Black	D3+	
Black/Black	A In3-		No band			Gry w/ Wht	Cmn		Gry w/ Wht	Cmn		Black/Black	D3-	
Yellow/Black	Cmn		No band											
Black/Black	Cmn		No band											
Brown/Black	Cmn		No band											
Black/Black	Cmn		No band											

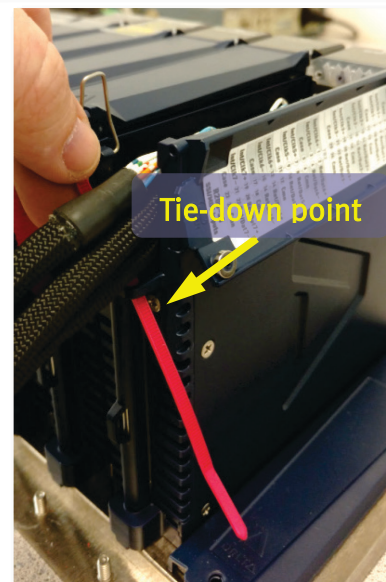


Installation Procedure

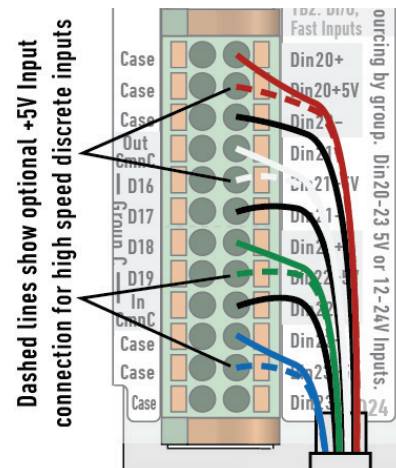
1. Insert the terminal block connectors for each cable assembly into the U14 module, tucking the upper cable into the groove:



2. Use a cable tie to attach all cables exiting module to the tie down location shown. This ensures that module door will close properly. The cable tie should clamp onto the heat shrink tubing. Do not overtighten.



3. The high-speed inputs (Din20 through Din 23) come pre-wired for 12-24 V signals. For 5V signals, press the orange button with a screwdriver and remove the wire from **Din+**, then insert the wire into the **Din5V+** pin.



4. Connect the pigtail ends to terminal blocks as required by the application. Delta recommends the use of ferrules.