



Application Note

MIC Power Supply Unit Extension

20 January, 2017

Customers can extend the distance between their analog MIC camera and the MIC PSU by using two junction boxes (customer-supplied). The boxes must be weather proof or explosion proof, depending on the model and the physical location of the box. The second junction box is required to reduce the size of the cable and to reduce the amount of conduit connections to the MIC PSU.

All cables used outdoors must have a UV-resistant outer jacket, or must be installed inside permanently earthed metal conduit. See the table below for the maximum distance and wire gauge recommended for each camera. The maximum distance is the distance between the two customer-supplied junction boxes.

Maximum Distance in Meters (Feet)

MIC Model	Maximum Power			18 AWG	16 AWG	14 AWG	12 AWG
	Camera	Heater	Total	m (ft)	m (ft)	m (ft)	m (ft)
400 (note 1)	25 W	11 W	36 W	46 (151)	73 (240)	116 (381)	185 (606)
412	36 W	18 W	54 W	32 (106)	51 (168)	81 (267)	129 (425)
500 Classic	25 W	--	25 W	46 (151)	73 (240)	116 (381)	185 (606)
500 Pro	25 W	11 W	36 W	46 (151)	73 (240)	116 (381)	185 (606)
550	18 W	--	18 W	64 (211)	102 (336)	163 (534)	259 (849)
612	19.8 W	9 W	28.2 W	59 (192)	93 (305)	148 (485)	235 (772)

Notes:

1. Based on 18 VAC +/-15% = 15.3 VAC as the minimum voltage.
2. To achieve the distances listed, any models with the heater option **MUST USE** two conductors for camera power and two additional conductors for the heater. Refer to the drawings for the separate camera and power connections.
3. For specific details about extending the distance between a MIC440 explosion-protected camera and a MIC PSU, please see the MIC440 User Manual.
4. MIC IR models are not approved for extended distances because of the special power requirements for the IR illuminators.

See the next page for diagrams of the connections between the MIC cameras, the junction boxes, the MIC PSU, and the head-end system.

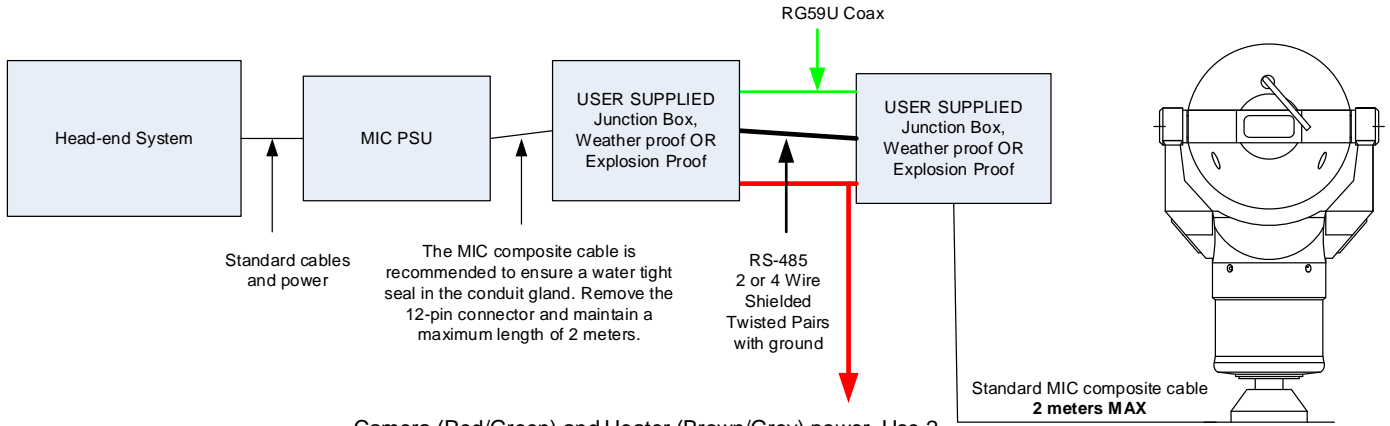


Application Note

MIC Power Supply Unit Extension

20 January, 2017

Connections for MIC camera models 400 (AL and SS), 412, 500 Classic and Pro, 550 Standard and Classic



Camera (Red/Green) and Heater (Brown/Grey) power. Use 2 cables with 2-conductors in each cable. Refer to the table above for the distance limitations.



CONNECTIONS

	Coax Core		
Video Signal			A
Video Ground	Coax Screen & TP Drains		B
Camera 18 VAC Power	Red		L
Camera 18 VAC Power	Green		M
Optional Tamper Switch (Not available when heater is used)	Black		C
Tamper Switch Return OR Heater Power	Brown		D
Washer Drive Return OR Heater Power	Grey		E
Optional Washer Drive (Not available when heater is used)	Orange		F
RS-485 Out (A)	Blue		G
RS-485 Out (B)	Violet		H
RS-485 In (A)	Yellow		J
RS-485 In (B)	White		K
			Overall Screen to Connector Shell

CONNECTOR VIEWED FROM SOLDER SIDE

CONNECTOR VIEWED FROM FRONT

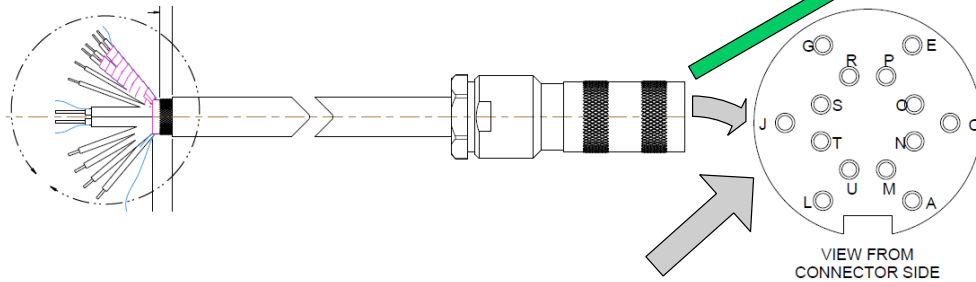
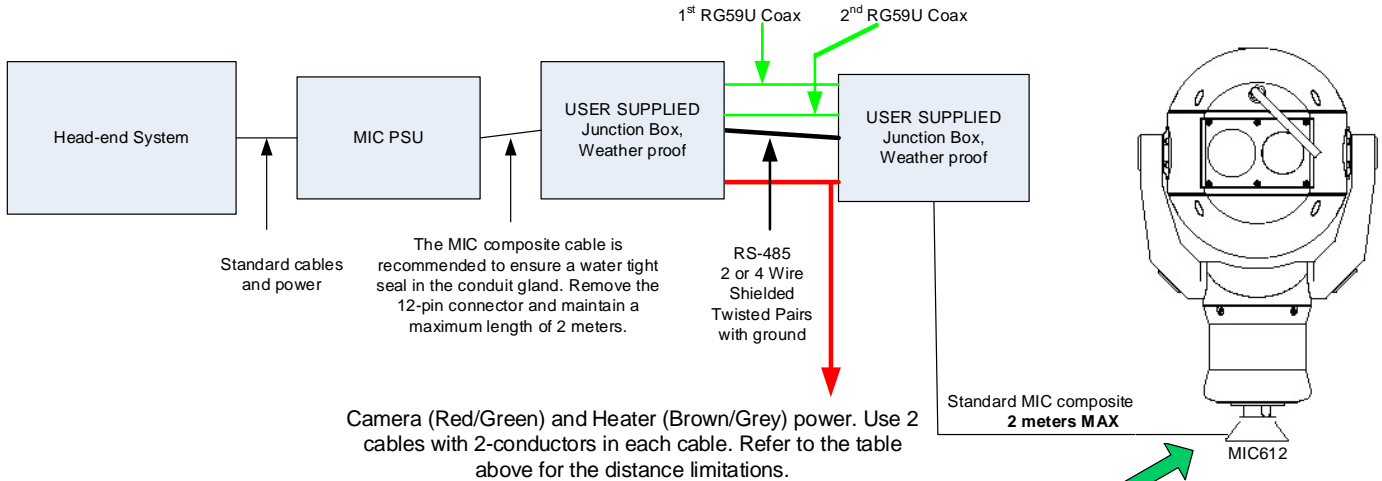


Application Note

MIC Power Supply Unit Extension

20 January, 2017

Connections for MIC612 Thermal Camera



Pin Out Connections

SCREEN OVERALL	CONNECTOR SHELL
Coax Core (Natural)	1 VIDEO 1
Screen (Black)	SCREEN 1 C GND
Coax Core (Black)	SCREEN 12 E VIDEO 2
--	SCREEN 12 G N/C
Red	6 J AC 1
Green	7 L AC 2
Brown	8 M AUX 1
Grey	9 N AUX 2
Orange	11 O WASHER
Black	10 P TAMPER
Yellow	4 R RXA
White	5 S RXB
Blue	SCREEN 2345 T TXA
Violet	3 U TXB