

TERMINATING THE GAMECHANGER CABLE

Part numbers, best practices and more...

Gauge sizes and OD's

All GameChanger Cable™ conductors are 22 AWG. OD's range from "similar to a Cat 6" to "a little smaller than Cat6A" with the exception of the Class I, Division 1 construction.

Jacks and patch panels

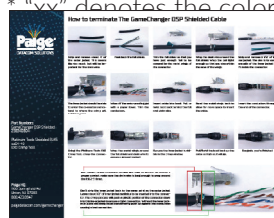
All compliant Cat 6 or 6A jacks and patch panels support 22-26 AWG and should work with GameChanger

Modular RJ45 Plugs

While other plugs may work, we highly recommend the below options from Simply45™ and Platinum Tools™

Part Number	Description	O.D. (nom)	Simply45			Platinum Tools	
			Pro Series Connectors	Strain Relief	Crimp Tool	Connectors	Crimp Tool
2583103xx	Riser	.236"	S45-1700P	S45-B002	S45-C101	100028C	100061C
2583003xx	Plenum	.220"	S45-1700P	S45-B002	S45-C101	100028C	100061C
2583705xx	Plenum Shielded	inner jacket	S45-1755P	S45-B004	S45-C101	202052J	100061C
		outer jacket					
258950306	Indoor/Outdoor Plenum	.220"	S45-1700P	S45-B002	S45-C101	100028C	100061C
258320804	OSP	.300"	S45-1700P	S45-B002	S45-C101	100029C	100061C
258340804	OSP Shielded	inner jacket	S45-1755P	S45-B004	S45-C101	202052J	100061C
		outer jacket					
258802404	ITC-HL CI/D1 (Hazardous Location)	.984"	S45-1700P	S45-B002	S45-C101	100028C	100061C

* "xx" denotes the color code.



[Click here](#) for an illustrated guide to terminating the OSP Shielded GameChanger.

How to terminate The GameChanger OSP Shielded Cable

Part Numbers:
GameChanger OSP Shielded
258340804

Platinum Tools Shielded RJ45
ezEX-48
EXO Crimp Tool

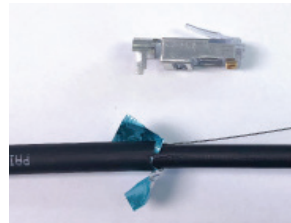
Simply45 RJ45 Pro Series
S45-1750P
S45-C101 Crimp Tool



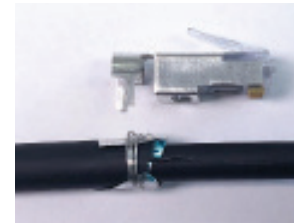
Strip and remove about 4" of the outer jacket. This seems like too much, but will be important for the drain wire.



Peel back the foil shield.



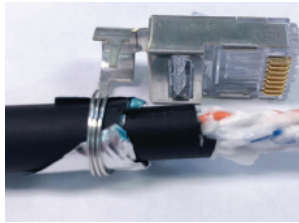
Trim the foil shield so that you have just enough foil to be covered by the metal wings of the connector.



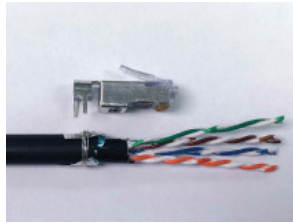
Wrap the drain wire around the foil shield. Wrap the coil tight enough so that you stay within the area of the wings.



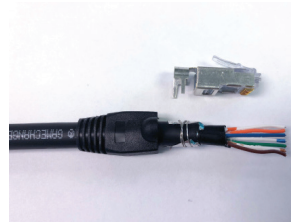
Strip and remove 3 1/2" of inner jacket. The aim is to leave enough of the inner jacket to fit inside the connector.



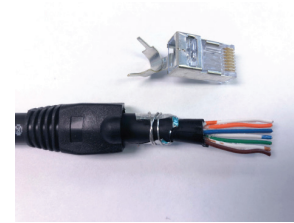
The inner jacket should be able to enter the connector and extend to where the crimp will hold it in place.



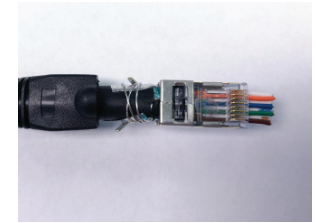
Wipe off the waterproofing gel with a paper towel. Trim the conductors.



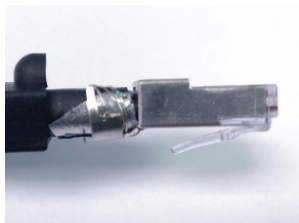
Insert cable into boot. Pull or twist boot back behind the foil and drain wire.



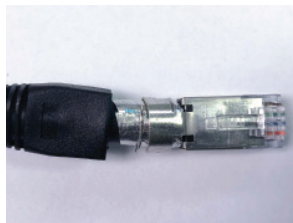
Bend the metal wings back to allow for more space to insert the cable.



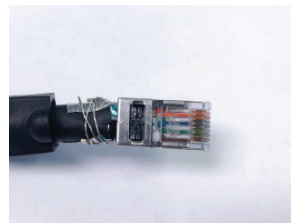
Insert the conductors through the end of the connector.



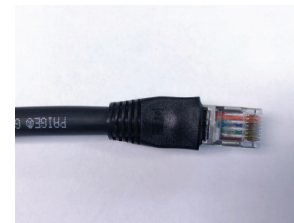
Using the Platinum Tools EXO Crimp Tool, crimp the connector.



Wrap the metal wings around the foil shield and drain wire to assure a ground contact.



Be sure the inner jacket is visible in the crimp window.



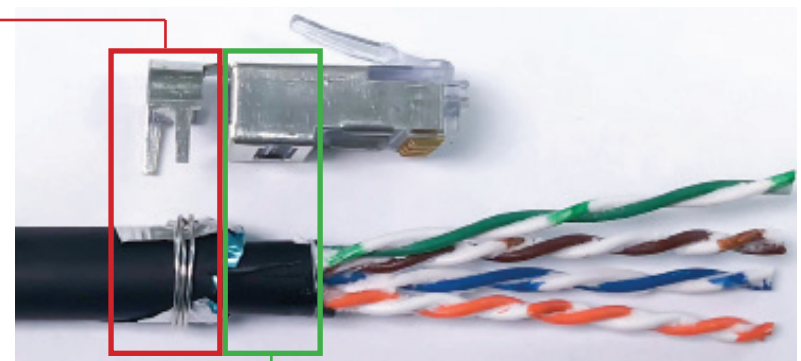
Pull/twist the boot back up the cable as high as it will go.



Congrats, you're finished!

The "wings" of the connector provide the path to ground. To ensure a proper contact make sure the drain wire is long enough to wrap around the foil 2-3 times.

Don't strip the inner jacket back to the same point as the outer jacket. Leave about 1/2" of inner jacket available to be inserted into the connector. The crimp process will push a plastic portion of the connector down into this inner jacket to ensure a tight connection. Without the inner jacket in place the crimp could inadvertently push up against the conductors causing a bad connection.



GAMECHANGER CABLE CONDUIT FILL CHART

Conduit Size		Riser	Indoor / Outdoor Plenum	Plenum	Plenum Shielded		OSP	OSP Shielded	
	Part #	2583103--	2589503--	2583003--	2583705--		258320804	258340804	
	O.D.	.236"	.220"	.220"	.224"	.280"	.300"	.264"	.340"
0.75"	EMT	4 @ 33%	5 @ 36%	5 @ 36%	3 @ 35%		3 @ 40%	1 @ 17%	
	Rigid	5 @ 40%	5 @ 35%	5 @ 35%	3 @ 34%		3 @ 39%	1 @ 17%	
1.00"	EMT	7 @ 35%	9 @ 40%	9 @ 40%	5 @ 36%		4 @ 33%	3 @ 32%	
	Rigid	8 @ 39%	9 @ 39%	9 @ 39%	5 @ 35%		5 @ 40%	3 @ 31%	
1.25"	EMT	13 @ 38%	15 @ 38%	15 @ 38%	9 @ 37%		8 @ 38%	6 @ 36%	
	Rigid	13 @ 37%	16 @ 40%	16 @ 40%	9 @ 36%		8 @ 37%	6 @ 36%	
1.50"	EMT	18 @ 39%	21 @ 39%	21 @ 39%	13 @ 39%		11 @ 38%	8 @ 36%	
	Rigid	18 @ 38%	21 @ 39%	21 @ 39%	13 @ 39%		11 @ 38%	9 @ 39%	
2.00"	EMT	30 @ 39%	35 @ 40%	35 @ 40%	21 @ 39%		18 @ 38%	14 @ 38%	
	Rigid	31 @ 40%	35 @ 39%	35 @ 39%	22 @ 40%		19 @ 39%	15 @ 40%	
2.50"	EMT	53 @ 40%	61 @ 40%	61 @ 40%	38 @ 40%		33 @ 40%	25 @ 39%	
	Rigid	44 @ 40%	51 @ 40%	51 @ 40%	31 @ 39%		27 @ 39%	21 @ 39%	
3.00"	EMT	80 @ 40%	93 @ 40%	93 @ 40%	57 @ 40%		50 @ 40%	38 @ 39%	
	Rigid	68 @ 40%	78 @ 40%	78 @ 40%	48 @ 39%		42 @ 40%	33 @ 40%	
3.50"	EMT	105 @ 40%	121 @ 40%	121 @ 40%	74 @ 39%		65 @ 40%	50 @ 39%	
	Rigid	91 @ 40%	105 @ 40%	105 @ 40%	65 @ 40%		56 @ 40%	44 @ 40%	
4.00"	EMT	134 @ 40%	155 @ 40%	155 @ 40%	95 @ 40%		83 @ 40%	64 @ 39%	
	Rigid	117 @ 40%	135 @ 40%	135 @ 40%	83 @ 40%		72 @ 40%	56 @ 40%	

* Calculated per NEC Chapter 9, Table 1 (fill limits: 53% for 1 cable, 31% for 2 cables, 40% for 3+) and Table 4 (EMT per Article 358, RMC per Article 344) using nominal cable OD. Provided as a planning reference only. Jam ratio, derating, pulling tension, bend radius, local amendments, and field conditions may further limit cable counts. Installer is responsible for verifying compliance with the NEC edition adopted in their jurisdiction.

