

FieldCast

Operation Manual

FieldCast Main Cable

Model: 2Core Single Mode

Heavy Duty, 200m on drum

www.fieldcast.eu

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Welcome

Thank you for purchasing FieldCast Main Cable for your live production work.

You purchased a 2Core Single Mode Heavy Duty Main Cable, 200m on drum. With this cable you can transmit signals over 200 meter robust fiber optic cable without any loss of information.

2Core means that you have 2 separate cores of fiber available. You can use them as independent channels to transmit a signal in whatever direction you wish. For instance, for bidirectional use where one channel goes from camera to switcher and the other channel goes from switcher to camera. Or for unidirectional use, for instance when transmitting two video signals of two PTZ cameras to the control unit. Fiber doesn't care what type of signal is transmitted, you can go video forth and audio back if you want, transmit control signal, ethernet, etc. The type of signal transported is completely determined by the type of device you put at both ends of the fiber optic cable.

Single mode means that the cable uses a small 9 micron fiber optic core which can only propagate a single ray of light (one mode), that travels through the cable in an almost straight line, with a



FieldCast product family

relatively low number of light reflections, resulting in less signal attenuation. Single mode cable is typically used for long distances signals.

Heavy Duty means that the cable is extremely robust. Having an outer diameter of 6.5 mm the cable can stand the harsh conditions out in the field. Still the cable is flexible and lightweighted. With small form factor, sturdy, FieldCast connectors at both ends of the cable, the FieldCast Heavy Duty Main Cable is very suitable for live events registration.

The FieldCast product family. A FieldCast main cable cannot be connected directly to a third party device. Both ends of the cable have a FieldCast connector so you need a bridge that has a FieldCast connector on one side and standard LC connection on the other side.

FieldCast has a range of products to bridge to LC devices, such as chassis connectors, adapter cables, adapters and panels. Check them out on <https://fieldcast.eu/products>. FieldCast also has SDI converters that can connect directly to the main cable without using a bridge, thus completely avoiding the LC environment. So there is lots of possibilities to connect to LC and SDI devices: fiber optic converters, routers, switchers, SDI cameras, SDI monitors, etc.



Follow the color code



Coupler Cable to create longer cable lengths

FieldCast color coding system allows you to find the right FieldCast adapter cable, chassis connector, adapter, or converter to connect to your main cable. The connector on your main cable is marked with two yellow rings, where two rings stand for 2Core and yellow stands for Single Mode. Just follow the color code, pick out a FieldCast product with 2 yellow rings or dots, and you are always sure that the product neatly connects to your main cable. Simple and easy!

There is one exception to the rule. You cannot connect a main cable directly with a main cable . If you want to extend your 200 meter cable to longer lengths you can use a FieldCast Coupler Cable in between two drums. With a coupler cable you can cascade two or more main cables and double, triple, quadruple etc. the total cable length at will. Again, follow the color code.

In this manual you will find instructions how to use the FieldCast Main Cable and how to clean them. On the last page you will find the specifications.

If you need any extra service and support you can send an email to support@fieldcast.eu

Using FieldCast Main Cable

■ Step 1. Unlock the drum by turning the lever at the backside of the drum counterclockwise. You now feel that you can unwind the cable.

■ Step 2. Roll out the cable.

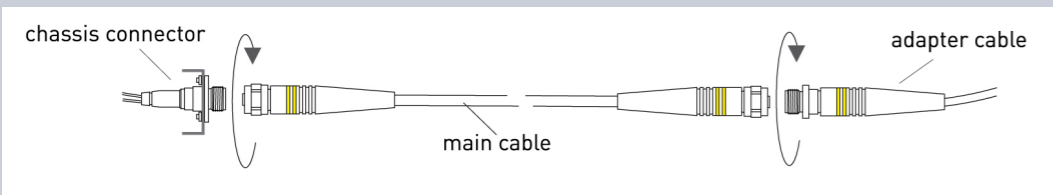
Obviously, there are two ways to roll out a cable.

The first way is to put the drum on a fixed place and start rolling out from there. Especially when the drum is heavy this is the preferred way of rolling out a cable. Be careful that the cable doesn't stick or hook on undesirable objects on the way.

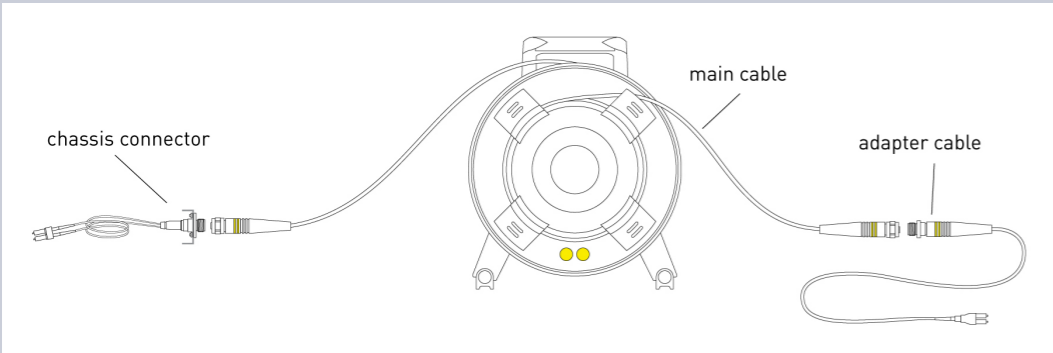
Another way is to roll out the cable while walking with the drum in your hand and turning the lever at the front side when unwinding. If the drum is not too heavy and you have many corners and bends on the way this is the preferred way of rolling out a cable.

Either way, you end up on one side with a FieldCast connector at the short end of the drum, and on the other side with a FieldCast connector on the long side of the drum.

■ Step 3. Connect the FieldCast connectors to a FieldCast chassis connector, adapter cable, adapter, panel or converter.



Step 3. Connecting FieldCast connectors



Sturdy FieldCast fiber optic connectivity

Connecting FieldCast connectors is very simple. Unscrew the dust caps from both Fieldcast connectors. Hold one hand on the black sleeve of the main cable connector. Turn from here a bit around until it clicks in the connecting FieldCast connector. Put your other hand on the nut, which is at the end of the main cable connector, and screw it on to get a tight fit. Now you have a sturdy FieldCast connectivity. Screw the dust caps of the two FieldCast connectors to each other so that they cannot stand in the way when doing the job.

- Step 4. Lock the drum by turning the lever at the backside of the drum clockwise. You now feel that you cannot unwind the cable anymore.
- Step 5. When it's not a fixed installation disconnect the FieldCast connectors and wind up the cables back on the drum. Do not forget to screw back the dust caps on the FieldCast connector. And tie your cable back to the drum with the velcro provided on the drum.

Cleaning FieldCast Main Cable

Dust is the biggest enemy when working with fiber optic cables in general. A little dust in fiber optic connection can weaken or stop signal transmission through the cable. To be sure that everything works on the spot you need to clean your cable connections before you do the job.

It is unpredictable when a connector becomes dirty. If you experience intermittent signal loss or even complete signal loss, in most cases it's just dirty connectors and no real damage to the product. So cleaning is very important.

There are quite some advanced cleaning kits in the market, and some of them are pretty expensive. Not all solutions are suitable for FieldCast Main Cable though; we simply recommend standard cleaning swabs but they must have the right dimensions to fit into the FieldCast connector.

FieldCast offers affordable cleaning kits to clean FieldCast Main Cable connector, FieldCast Chassis Connector, and LC connector. Check them on <https://fieldcast.eu/products/cables/fieldcast-cleaning-starter-kit>



FieldCast Cleaning Kit 10

Basically, the process of cleaning fiber optic connectors is quite simple. You use fiber optic cleaning liquid to moisten swabs and pads, and use the swabs and pads to clean the fiber. For fiber optic cleaning liquid, isopropyl alcohol (> 99%) will do fine. This is pure alcohol that can be purchased from several online stores, from small to big bottles. There are also other fiber optic cleaning liquids in the market.

Without referring to specific cleaning products we will outline the basic cleaning steps below.

- Step 1. Take off the dust cap on the FieldCast connector.
- Step 2. Use a fiber optic cleaning swab with a diameter of 1.25mm. This will fit nicely into the holes of the FieldCast main cable connector.
- Step 3. Moisten the swab with the appropriate fiber optic cleaning liquid.
- Step 4. Insert the moistened swab in the holes of FieldCast main cable connector. Clean by holding the swab between your thumb and forefinger and gently circle the moistened swab in the holes of the connector.

That's basically it. For a more detailed instruction on how to clean fiber optic cable you can watch our training video on <https://www.youtube.com/watch?v=ccPDOrlejxQ&t=26s>

Specifications

2Core main cable SM HD (heavy duty) 200 meters

- two cores of protected fiber
- single mode 9/125
- outer cable diameter 6.5 mm.
- color coded (two yellow rings for 2Core single mode)
- cable length 200 meters in total
- robust male cable connector on both sides
- wound on Schill GT380 drum
- weight: 11.8 kg