Ultrafast fibre broadband

Independent installation guide

Gigaclear.com

Gigaclear
Ultrafast Fibre Broadband

Some of our Gigaclear customers connect their homes to the ultrafast fibre network independently. This guide will help you do it in three simple stages.

Contact us
If you have any questions or you're unsure about any part of the installation process, just call our field support team on:

01865 591121

The following cable lengths are free of charge when placing an order:

10m, 15m, 25m, 35m, 50m.

The cable lengths below are subject to a charge when placing an order.

75m - £48.00, 100m - £68.00

If you require a replacement cable you will be subject to a charge.

All prices include VAT.

Before you start…

Make sure you've got all the right tools, equipment and information you need to safely install your ultrafast broadband.

Like any project, it's always a good idea to consider each stage of the process. Getting all the tools and materials you need before you start will save time in the long run.

Correct cable length?

First of all, make sure you have the correct cable length. Don't worry if it's too long – you'll always need more than you think to secure it properly and any excess can be buried. However, if you're worried your cable is too short, please contact us for a replacement.

Note: The cable length cannot be altered, the plugs are welded onto the cable and if they are damaged the cable becomes useless.

Important Information

Your fibre cable is designed to be buried underground between your house and the connection pot at your property boundary, so you'll need to dig a trench. For extra protection, we recommend putting the cable inside a plastic conduit or PTFE water pipe.

Always check that there are no gas, water or electrical services where you will be digging.

You are not permitted to dig in the Public Highway.This includes the pavement and usually the verge as well. Your pot should be positioned at your boundary so you can access it from your own land. If you have any queries, please contact us (details on page 2). You must never leave cable trailing over the highway or create an obstruction or a trip hazard.

If you choose to install your service independently, you must accept responsibility for your safety and the safety of others. Gigaclear plc is not responsible for any loss, damage or inability to connect to our broadband service arising from any non-Gigaclear approved installation.

Remembering where you installed your cable

We recommend drawing a map or taking a photo of where the cable is buried for future reference – that way you'll avoid digging into it at a later date.

Where to place your router

It's best placed at the centre of your property. This can give you optimum WiFi coverage and allow you to use wired connections with faster devices (computers/ smart TVs etc). Large properties, stone walls and foil insulation cladding will affect the WiFi signal, but this can be boosted with devices such as power line adapters or WiFi extenders. If in doubt, please get in touch with our team who'll be happy to help.

Double-check your equipment

Please check your DIY installation kit has everything included based on the picture below. If anything is missing please email: **fieldsupport@gigaclear.com**

Router

Switching Adapter

Silicone
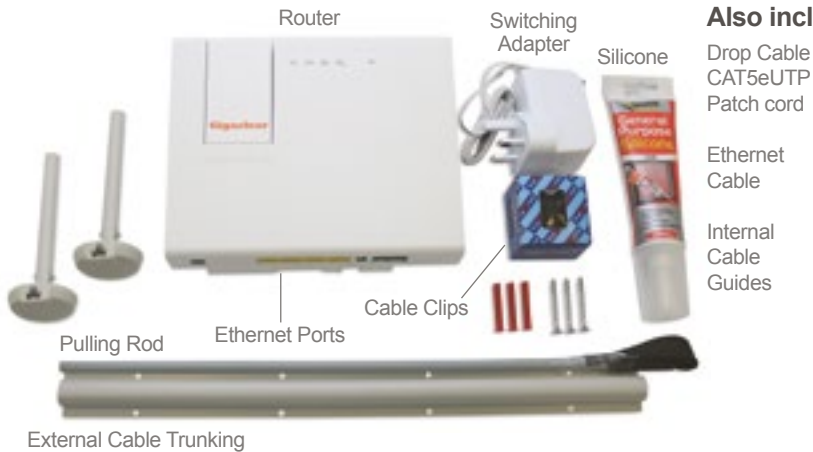
Also includes:

Drop Cable
CAT5eUTP
Patch cord

Ethernet
Cable

Internal
Cable
Guides

Cable Clips

Pulling Rod

Ethernet Ports

External Cable Trunking

You'll also need:
• electric drill
• 13mm masonry bit (suitable for your external wall and boundary wall.)
• 5.5mm masonry bit
• screwdriver

Handling pure fibre optic cables

DON'T remove the dust caps until you're ready for the final connection. Dirt can ruin your pure fibre.
NEVER stare into the ends of any fibre connectors (our fibre light is safe to look at but we recommend you don't do this).
DON'T bend your cable too tightly. We recommend nothing tighter than the radius of a 50p piece.

Stage 1: Preparing your property

Here are the first few steps to connect your home to the ultrafast fibre network.

Digging the cable trench

Every property is different. So you'll need to consider how your cable trench will get around concrete, roots, lawns, pavements etc. We recommend that your trench is 150mm (6") deep in soft ground (standard depth for private land) and that you protect the cable by running it through a PTFE waterpipe or similar ducting. **If you have any questions, please contact our care team on 01865 591121.**

Fitting the router back plate

Take the back plate from your installation kit. Place it on the wall (where you want your router to be), noting the entry point and spare length of the fibre cable and the need to be **within 1M of a mains power socket**. Mark the drill holes, making sure there's enough space below the router for the cables. Then use the 5.5mm drill bit, rawl plugs and screws to fit the back plate to the wall.
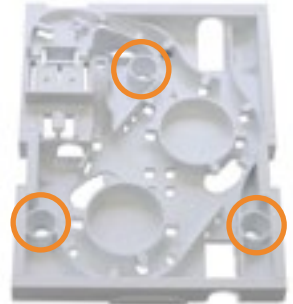
Drilling cable entry point

The best place for your cable to enter the property is just below or near the desired location of your router.

⚠ **We advise all customers to check for mains cables, water pipes and other services using a suitable 'locator' before they commence any drilling.**

Stage 2a: Connecting the router

Now that you've fitted the back plate, it's time to connect the cable and router.

Feeding the cable inside

Start by pushing the cable-pulling rod through the wall. You'll then need to go outside and insert the cable end into the flexible pulling rod – secure this with tape. Then gently pull the cable through the wall and disconnect the pulling rod from the cable.

Fitting the cable and router

1. Take the DRG-FTU – Base kit (connector holder and locker) yellow clips that say top and base.
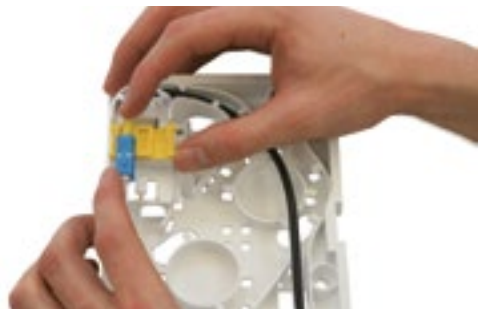

2. Take base connector.
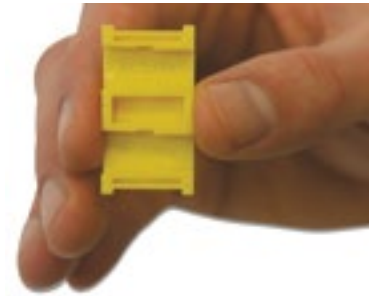
3. Push connector into holder on the back plate.

4. Take the drop cable and insert into the back plate (black fibre cable).

5. Push the blue head connector cable into the yellow base making sure the guiding lug on the blue end cable is on the top. Please note: this should fit tightly but will not be forced.

6. Make sure the drop cable is threaded and inserted into the back plate using the guides.

7. Fit the yellow top connector holder over the top of the base connector and make sure it clicks together.

8. Fix the drop cable inside the router using the cable ties provided.

9. To fit lid cover over the back plate please ensure that the cable cut out (as marked) is removed to allow the cable to pass through.

10. Close the lid cover of the router over the back plate and clip shut.

11. Take the router and remove the plastic lug from the middle section. **Remove the dust cap from the cable**

12. Slide the Gigaclear router into the base as per diagram until it clicks.

13. Job complete.

Securing the cable inside

1. Use the clips to fix the cable to the wall below the router, then feed any slack through the hole.

2. Remove the cover from one of the lead-in units and fit the shank of the unit over the cable.

3. Next, apply silicone sealant to the large circular end and push the lead-in unit into the cable hole. When the sealant is dry, replace the lead-in unit's cover to secure the cable using the correct bend radius (no more than a 50p piece).

Cable positioned in Lead-in
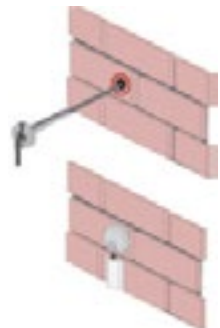
Securing the cable outside

Repeat the process above to secure the cable to the outside wall. Make sure you cover the fibre with the cable sheath down to ground level.


Cable with bend cover attached

REMEMBER: leave a gap between the top of the cable sheath and the cable hole so that the lead-in unit cap can be clipped on when the sealant has dried.

Stage 2b: Connecting the boundary box

This is where you connect your newly installed router to the ultrafast fibre network.

The ultrafast network is brought to your property boundary via a black 'Toby Box' buried underground (similar to a water meter or stop cock box).
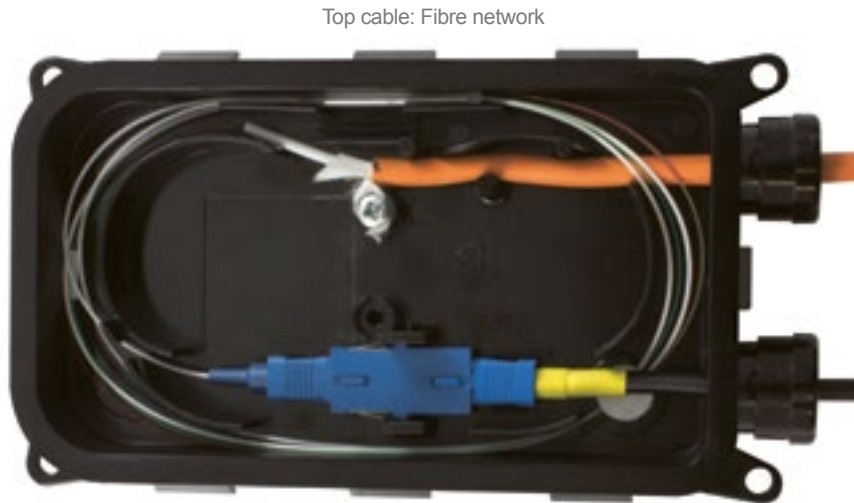
Top cable: Fibre network

Bottom cable: Customer cable

Connection Box

⚠️ **IMPORTANT: Make sure that no dirt enters the connection box and that the fine fibres are handled carefully. Any cable bends should be no tighter than if they were wrapped around a 50p piece.**

Cables in CCP are very fragile so extra cable is required.

1. Open the lid of the 'Toby Box' with a flat blade screwdriver and carefully lift out the fibre connection unit.

2. Drill a hole from your boundary into the pot, making sure that public highway surface is not disturbed (please note that you will need special permission from your local council to break public highway surface, if you are unable to drill in directly).

3. Put tape on the end of your fibre for extra protection and push your fibre cable into the 'Toby Box' through the hole near the bottom of the box and bring the fibre up to the connection unit, ensuring that you leave sufficient length for any future maintenance inside the 'Toby Box' before you refill your trench.

4. Unscrew and unclip the connection unit lid. Inside, you'll see a blue or green rectangular fibre connector.

5. Thread your cable through the side of the connection unit.

6. **ONLY** then remove the rubber and plastic dust caps from the cable and the connection unit, making sure it is correctly aligned to the fibre connector, click the fibre into the receptacle.

7. Pull the rubber grommet from the end of the connection box. Open and fit over the cable, then slide it back in place, this prevents debris entering the connection unit when buried.

8. Replace the connection box lid.

9. Put the connection box back in the pot. Make sure the cable entries face down so your connection box will still drain if it floods (our fibre still operates under water). Also, ensure there is enough cable inside the pot in case the box ever needs removing and that it is coiled rather than bent into the box.

10. Any leftover cable outside the 'Toby Box', should be carefully coiled and buried at least 30cm deep.

    REMEMBER: Make a note of where it's buried.

Stage 3: Testing and finishing touches

Now that your property fibre is installed, it's time to test the connection and finish the job.

Head back to your router and make sure that it's firmly clicked together. Then insert the power plug into the base, switch on and wait for two minutes – all four router lights should illuminate indicating that it's operating correctly.

What do my router lights mean?

LED		Activity	Description
⏻	Power Symbol half circle	On (green)	Power On
		On (red)	Error
		Blink (Green)	Booting
		Off	Power Off
⟨ ⟩	Optical link	On	WAN link active
		Off	WAN link inactive
☎1	Phone symbol1	On	Phone line active 1
		Off	Phone line 1 inactive
☎2	Phone symbol2	On	Phone line active 2
		Off	Phone line inactive
📶	WiFi Symbol	On	WLAN inactive
		Blink	WPS active
		Off	WLAN disabled
	LAN ports	On (green)	Link operating at 1000Mbps
		On (orange)	Link operating at 100 or 10 Mmbps
		Blink	Activity

Reset Button

Restart
To restart DRG700 without erasing the saved configuration:
1. Press the button for less than 5 seconds.
2. Release the button.

Factory Reset
To restart DRG700 with all configuration data cleared and factory settings restored:
1. Press the button for more than 5 seconds.
2. Release the button.

WPS Button

WPS button
This button is used to automatically connect a WPS-enabled wireless client to the DRG700. For details about the connection procedure refer to the DRG700 **Quick Installation Guide**.

On/Off Button

On/Off button
This button will turn router power on/off. (This is only applicable to the DRG7820 mode).

Software upgrade

If your router needs a software upgrade, it will do this automatically by restarting itself after a couple of minutes. This process will take 6-7 minutes during which the lights will flash and there will be no connectivity.

Activating the service

Before using the fibre network for the first time you'll need to go through the following activation steps on your computer or tablet:

First things first, you'll need your customer number (starts Cxxxx…) and your WiFi SSID and WPA keys (they're inside your installation box and on the router itself, if you are using WiFi.)

We recommend initially connecting to the router with an Ethernet cable to keep things simple. If this is not possible, locate the card with your 'WiFi SSID' and password, then connect your wireless device.

Next, open a new webpage – you'll be diverted to the Gigaclear activation portal. Check that your address details are correct, tick the acceptance box and then enter your customer number and click **'Activate'**.

The service will take a couple of minutes to activate. You'll then be redirected to the Gigaclear website and you'll have complete access to the Internet.

If you need any help with activation, just call our customer help desk on **01865 591121.**

Support

To contact Gigaclear Support,
please call or email our team.

📞 01865 591121

✉ fieldsupport@gigaclear.com

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