

Charlemont Connect Residential Service Connection and Installation Policy

Note: This policy is subject to change.

Last updated: November 2, 2020

Introduction

Charlemont Connect will offer fiber-optic broadband internet service with an optional voice-over-IP (VOIP) telephone add-on service to premises in the town of Charlemont. This policy describes the process for connecting to the town's fiber-optic network and the subsidies that will be made available to cover some or all of the connection charges.

During the construction of the network, the town is offering subsidies of up to \$1400 on the installation and connection charges to encourage townspeople to get connected to the network and use the town internet service. These subsidies are being offered only during the connection subsidy period as described below.

The standard internet service provided by Charlemont Connect does not permit sharing of internet connections by multiple premises or resale or redistribution of internet service to others.

Definitions

Definitions of terms are at the end of the document.

Connecting to the network

The connection between a home or business and Charlemont's municipal fiber network is called a "drop". A drop consists of two parts: the exterior service drop and interior installation.

Exterior service drop

An exterior service drop connects a tap on the town's fiber distribution network to a network interface device (NID) that is located on the outside of a building. A standard exterior drop consists of installing fiber optic drop cable along a path designed by Charlemont Connect from the nearest multiport service terminal (MST) or tap typically located on a utility pole along the

public way, to a NID on the exterior of the premises. Charlemont Connect has designed the least expensive path based on the existing utilities at each premises (i.e. aerial or underground or in some cases a mixture). Please contact broadband@charlemont-ma.us to determine the designed installation path and estimated cost for your premises.

If a property owner requests an installation path that is different than the designed path, then they will be responsible for any extra costs associated with the alternative path. Property owners with underground utilities may be able to reduce installation costs by preparing or installing their own underground conduit or by using an aerial span where feasible.

All provided equipment exterior to the premises, including the NID, will remain the property and responsibility of Charlemont Connect.

Customer responsibilities:

1. The property owner must sign a Property Access Form to allow the installation of the exterior service drop. The property access form grants Charlemont Connect or its representatives permission to come onto the property to survey existing conditions and to install the exterior service drop.
2. The customer or property owner must agree to pay for all charges that are in excess of the town subsidies. An estimate of the installation cost will be provided prior to installation.

Interior installation

Interior installation consists of wiring the NID to an interior device called an optical network terminal (ONT) which is in turn connected to a router and optionally to a device that provides VOIP telephone service.

Standard interior installation includes:

1. Installation of an ONT in the basement or on the first floor
2. Installation of an optical jumper from NID to ONT in basement or on first floor
3. Installation of CAT6 wire from ONT to a first-floor router location, up to 50 feet in length
4. Installation of CAT6 wall-plate, if needed
5. Installation of router and WiFi setup, if using the router provided
6. Installation of an optional telephone interface device

Customer responsibilities:

1. Customer must provide 110 volt AC electrical outlets at the ONT and router locations.
2. Customer will provide any desired battery backup for the ONT and router. This might be an uninterruptible power supply (UPS) or it could be a connection to a backup generator.

3. Customer is responsible for any additional wiring and for interfacing with other devices, such as computers or TVs. The ISP will provide customer support to answer questions.
4. Customer must sign up for internet service to schedule an interior installation.

All provided equipment, including the NID and ONT, the supplied router and any telephone interface device, will remain the property of Charlemont Connect or the ISP.

The interior customer premises wiring becomes the property and responsibility of the customer. Any optional customer-supplied UPS or router remains the property and the responsibility of the customer.

After an installation is verified as working, service calls unrelated to the Charlemont Connect equipment will be charged to the subscriber. There is no installation credit for using your own router.

Optional telephone service

For subscribers who choose the optional VOIP telephone service, standard interior installation also includes installation of an Ooma Telo or similar device which will provide phone service for connected wired telephones. The customer may also purchase additional wireless base stations to use with the phone service. Compatible wireless base stations are available online or from electronics retailers. The Ooma Telo and any additional base stations will accept standard phones. The customer's existing phones can be reused. Customers can also port and keep their existing phone numbers.

Phone-only installation

For customers choosing a VOIP telephone-only subscription, the exterior service drop is the same. The interior installation is similar, but no internet router is provided. For a standard phone-only installation, the NID is connected directly to an Ooma Telo device at a distance of up to 50 feet.

Installation Subsidies

To encourage townspeople to connect to the network, Charlemont Connect will offer subsidies of up to \$1400 to cover standard service drop and installation charges. These subsidies will be offered only during the limited subsidy period. For most premises, these subsidies will cover the full cost of the service drop and installation charges.

Subsidies for owner-occupied premises

One year internet subscription: \$1400 subsidy

For owner occupied premises, Charlemont Connect is offering a subsidy of up to \$1400 to cover the cost of the standard service drop and standard installation charges with a one-year internet subscription.

To qualify for this subsidy:

- 1) The owner must sign up for internet service with a one-year subscription.
- 2) The owner must complete a property access form by the applicable deadline.
- 3) The owner must agree to pay any installation costs in excess of the subsidy and any non-standard installation charges.

One year phone-only subscription: \$800 subsidy

For owner occupied premises, if the owner signs up for a one-year subscription for phone-only service, Charlemont Connect is offering a subsidy of up to \$800 to help offset the cost of the exterior service drop and standard interior installation charges.

To qualify for this subsidy:

- 1) The owner must sign up for VOIP telephone service with a one-year subscription.
- 2) The owner must complete a property access form by the applicable deadline.
- 3) The owner must agree to pay any installation costs in excess of the subsidy and any non-standard installation charges.

Owner-occupied cold drop: \$500 subsidy

For owner occupied premises, if the owner does not want to sign up for internet service, Charlemont Connect is offering a \$500 "cold drop" subsidy to help offset the cost of the exterior service drop. Interior installation is not included and will need to be purchased separately in the future to obtain internet or VOIP telephone service.

To qualify for this subsidy:

- 1) The owner must complete a property access form by the applicable deadline.
- 2) The owner must agree to pay any installation costs for the exterior service drop in excess of the subsidy.

Subsidies for rental premises

For rental properties, Charlemont Connect is offering a subsidy of up to \$1000 towards the cost of a standard exterior service drop and a separate subsidy for the full cost of a standard interior installation for each rental unit. This policy will apply to multiple-dwelling-unit buildings with up to a maximum of 6 units, provided that the service drops are done as separate installations to each rental unit. Allowable subsidies for larger rental properties will be determined on a case by case basis.

To qualify for the \$1000 subsidy on the standard exterior service drop:

1. The property owner must complete a property access form by the applicable deadline.
2. The property owner must agree to pay any installation costs for the exterior service drop in excess of the subsidy.

To qualify for the free standard interior installation:

1. The subscriber must sign up for a one-year internet subscription or a one-year phone-only subscription by the applicable deadline.

Deadlines

The subsidy program is designed to provide an incentive to connect to the network during network construction while the installation crews are in town. Deadlines will be established for requesting a network connection in order to receive the subsidies described above.

Connecting after the subsidy period

Subscribers requesting network connections after the subsidy period ends will be responsible for the full cost of installing the exterior service drop and all interior installation charges. Network connection costs currently start at \$715 and increase depending on the details of your service location.

Service reconnection

For premises that have previously had internet service, reactivation of service does not require exterior installation or a full interior installation. In most cases, the router can be mailed to the subscriber for a nominal charge and configured by the subscriber with telephone support from the ISP. If a service call is requested by the subscriber or is required to complete installation, the cost of the service call will be charged to the subscriber.

Commercial Premises

For most home-based and small businesses, the installation process is the same as for residential properties. Large commercial businesses with specialized needs may incur additional installation charges which will be determined on a case-by-case basis.

The subsidies available for residential properties are also available for commercial properties subject to the same terms.

Commercial-grade internet service and internet service offerings that permits resale or redistribution will be available at an additional charge.

New Construction

Customers requesting service to new premises constructed after the subsidy period will be responsible for all applicable costs, including the cost of any required utility pole access applications, any utility pole make-ready work, any network extensions on private property, the full cost of the service drops and interior installations and administration and overhead costs of providing service to the new location. Charlemont Connect advises home builders to include costs to connect to Charlemont's broadband network in their home building plans.

Cancellation Policy

Subscribers who receive installation subsidies other than the cold-drop subsidy shall maintain service for at least 12 months. Subscribers who received subsidies and cancel service within the first 12 months will be assessed a \$200 early termination fee.

The router and any telephone interface device must be returned if service is cancelled. Subscribers will be billed for any routers and telephone interface devices not promptly returned in good working order.

Definitions

CAT6: Category 6 ethernet wiring connecting ONT to router. CAT6 supports network connections up to 10 Gbps within a premises, providing the ability for future network speed enhancements beyond 1 Gbps.

Charlemont Connect - The working name of the Charlemont Municipal Lighting Plant (MLP), which is the entity in charge of the fiber-optic broadband network owned by the Town of Charlemont.

Cold Drop: An exterior service drop that is installed without any interior installation. No internet service is available over a cold drop.

Distribution Network: The fiber from the town network hub that runs along the street.

Exterior Service Drop: Fiber optic cable from the distribution network to the outside of the premises. In most cases, a service drop will consist of a single fiber cable connected at one end to an MST located along the distribution network and connected at the other end to a NID, normally attached to the outside of the premises.

Gbps: Gigabits per second. A measure of the amount of data that can be transferred through a network connection in one second. 1 Gbps is approximately 40 times faster than the fastest satellite Internet available in Charlemont, 100 times faster than 4G wireless, 300-500 times faster than the Verizon DSL connections some Charlemont residents have, and 20,000 times faster than a typical dial-up connection.

Network Hub: The network hub is in a room in the basement of the town hall. The network hub is where all of the town's fiber optic cables connect. It houses the electronics used to serve each home and to connect the town's network to the internet.

Interior Installation: Fiber from the outside to the inside of the premise, interior wiring, and the installation and configuration equipment inside customer's premise. This includes an optical jumper cable that connects the NID to an ONT device, normally located in the basement of the premises. The ONT will typically be connected by CAT6 wiring to a router located on the first floor of the premises.

ISP - Internet Service Provider. An ISP is a company that provides internet service to end users. Charlemont Connect will contract with an ISP to provide internet service, customer support and billing.

MST: Multiport Service Terminal. A box in the distribution network containing one or more taps for service drops. Most of the MSTs will be located on utility poles along the roadway.

Network Extension: An extension of the distribution network onto private property that serves a single premise.

NID: Network Interface Device. Device on the exterior of a premises that connects exterior drop fiber to an optical jumper cable.

Optical Jumper Cable: Fiber connecting the NID to the ONT.

ONT: Optical Network Terminal. Optical/electronic device inside premise that translates between the optical (light) connection on the fiber network and the electronic network connection needed by computers, tablets and other devices.

Resale or Redistribution of Service: You may not resell, rent or loan your internet connection, for profit or for fee, or allow those outside of your premises to use your connection via wired, wireless or other means. For example, you may not provide Internet access to third parties through a wired or unwired connection or use your connection to facilitate public Internet access (such as through a Wi-Fi hotspot) or use it for high volume purposes. You may connect multiple computers/devices within a single home to broadband service, you may permit guests to access the Internet at your home.

Router: An electronic device inside the premises that allows multiple wired (“ethernet”) and wireless (“WiFi”) computers and devices to be connected to the network.

Subscriber: The person or business who signs up for, receives and pays for Charlemont Connect services.

VOIP: Voice over internet protocol. A technology for providing telephone service over the internet.