

# STRUCTURED MEDIA WIRING

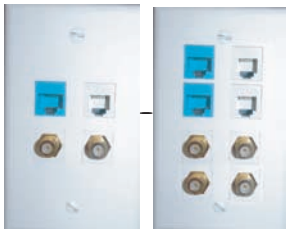
Wire for the Future of Voice, Video & Broadband. Become a Smart Home.

Figure 1

"Exploded View 1" depicts the minimum required outlets for voice, video & broadband.

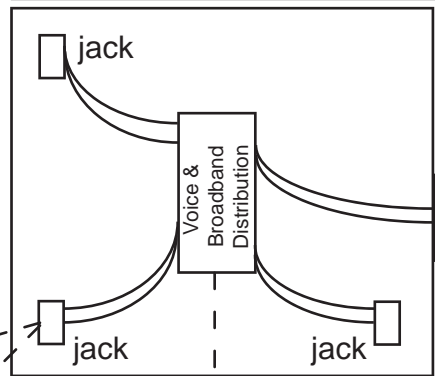
"Exploded View 2" depicts the suggested number of outlets for voice, video & broadband.

\*A home-run is required for each jack outlet.



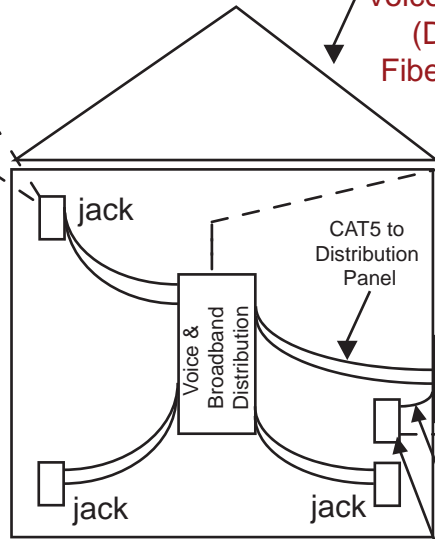
Exploded View 1      Exploded View 2

Voice & Broadband  
(Depicting a Copper-Fed Home)



Network Interface Device (NID)  
Outside of the Home  
Near the Meter Loop

Voice & Broadband  
(Depicting a Fiber-Fed Home)

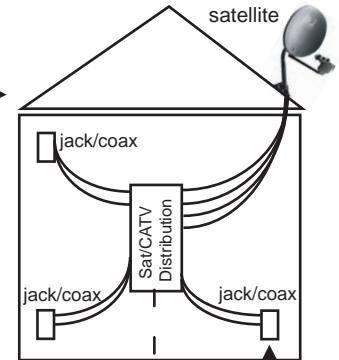


Optical Network Terminal (ONT)  
Outside of the Home  
Near the Meter Loop

Low Voltage Power Cable  
to ONT from Supply  
(Maximum Distance 50 ft  
Between ONT & Supply)

Power Supply For ONT  
(Must be wired for 120v AC.)

Video



Broadband Connection  
for Distribution

Rooms

DSL Modem



AC Power Ran to Structured Media Wiring  
Voice, Video & Broadband  
Distribution Panel

Phone Jack &  
Coax Drops  
(See Figure 1.)

If you have questions regarding Structured Media Wiring, please contact us at 622-5007 or visit STRAT NETWORKS at [www.stratanetworks.com](http://www.stratanetworks.com).



**STRATA**  
NETWORKS

Your UBTA-UBET Company, Moving Forward.  
(435) 622.5007 - [www.stratanetworks.com](http://www.stratanetworks.com)

## GUIDELINES FOR HOME WIRING

### Fiber to the Home Guidelines

It is necessary to place a universal power supply (UPS) inside a home that is being fed by fiber-to-the-home. STRATA NETWORKS recommends placing the UPS in your garage or utility room next to your media panel. The UPS is connected to the optical network terminal (ONT) by a low voltage cable provided by STRATA NETWORKS. This cable needs to be run in the wall space before insulation and dry wall is placed. The maximum length of the low voltage cable is 50 feet. Call STRATA NETWORKS while your electrician is wiring your home, and we will run the low voltage cable at no charge to you. You will need to provide a 120 volt receptacle to plug the UPS into; this provides power to the ONT and keeps the battery charged in the UPS so if there is a power outage, you continue to have phone service. The ONT needs to be placed within 10 feet of the meter loop with a # 10 ground wire pulled from the power ground to provide grounding for the ONT. It is necessary to run at least two Cat 5e cables from the ONT to your media panel; one for phone service and the other for broadband/internet service. STRATA NETWORKS recommends three Cat 5e cables so you have a spare for future use. From the media panel to rooms where you want phone service, you need to run one Cat 5e jack. For rooms where you want broadband service, you need to run two Cat 5e jacks as shown on the diagram.

### Copper Fed Home Guidelines

For homes being fed by copper-to-the-home, it is necessary to follow the fiber-to-the-home guidelines except you don't need to place a UPS, low voltage cable, or a 120 volt receptacle to plug the UPS into. These items are not required for copper fed homes. These homes will have a network interface device (NID) instead of an ONT but they still require the same placement and grounding at the meter loop as for the ONT. Two or three Cat 5e cables are recommended from the NID to the media panel as in fiber-to-the-home.

### Coax Installation Guidelines

High definition television service requires four coax cables run from your media panel to the outside of your home where the dish will mount on the house. Your dish will need to have an unobstructed view of the southerly sky. Digital video recorder (DVR) receiver requires two coax cables run from the media panel to where your TV sets will be placed in your home. It is required by satellite TV providers that all receivers be connected to a phone connection; this requires a phone jack near each TV set. A number-10 ground cable is required from your dish to the power ground.

## STRATA NETWORKS GUIDELINES FOR SUBDIVISION TELEPHONE & BROADBAND DEVELOPMENT

As a local telephone provider, we desire to see your subdivision successfully developed. To provide telephone and broadband service in new subdivisions, we require the developer to open the trenches in the subdivision for phone facilities and pay \$100.00 per lot or dwelling\*. \$100.00 will be credited for an AutoCAD copy of the final design of a multi-lot subdivision. Since we design our facilities around the same trench the Power Company uses, there is normally little if any additional trenching required.

The following is a checklist of essential items needed by our engineers so we can provide telephone and broadband facilities in your subdivision according to your time schedule.

Contact Engineering: Dial (435) 622-5007 and speak with an engineer.

Concept Plan: Provide a Concept Plan of the subdivision showing the total area of the development and the approximate number of lots or dwellings.

Service Order: Request a Service Order from STRATA NETWORKS Business Office. (Call (435) 622-5007, or visit us at 609 W Main, Vernal or 211 E 200 North, Roosevelt.) Provide the name of the subdivision, number of lots or dwellings, expected start date and a contact name and number. (At this time you can also pay the required amount for the current phase.)

Power Plat: Advise our engineer as soon as the Power Company's engineered job is available. This will allow us to design the Telco facilities to share the same trench. The sooner we know the power company has their engineering completed the better we can meet your schedule.

Road Crossings: Advise STRATA NETWORKS 1 week prior to placing ducts for road crossings. We will furnish, on site, the ducts needed.

Cost: \$100.00 per lot or dwelling must be paid before phone facilities can be placed in the trench.

Open Trenches: Notify us two weeks prior to trench openings to allow for scheduling and availability of material.

Occupancy Date: Please give us the occupancy date two months in advance so facilities can be placed and ready to provide service for the subdivision.

\*If developer does not work with STRATA NETWORKS as stated above and has to open its own trench to place phone facilities then the developer will be billed at actual cost of the construction.