

### Installation Rules

Only 2 components can be between any 2 Hopper Joey System receivers

- Nodes and 75 Ohm Terminators do not count for this restriction
- Minimize number of devices for the installation

Nodes must be connected to a DPP LNBF or DPP switch

Do not install any non-Hopper Joey System components after the Node

Maximum 200-foot cable length from LNBF to farthest Hopper

Maximum 200-foot cable length between any Hopper and Joey

Host lines must use RG-6 coaxial cable

Client lines can use either RG-59 or RG-6 coaxial cable

Taps can only be installed on host lines

When using 2 Taps, the entire Hopper Joey System must use RG-6 coaxial cable

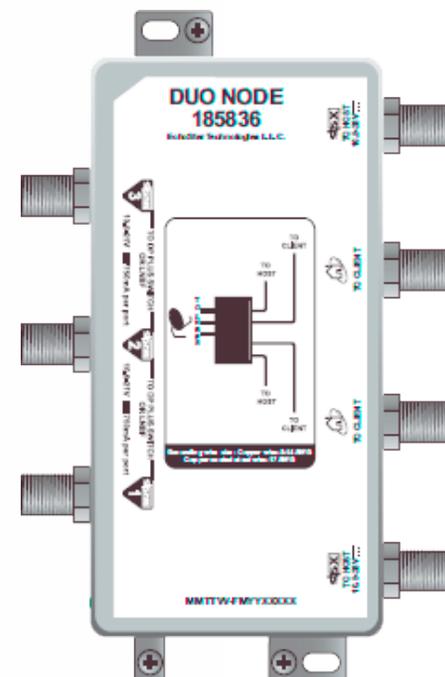
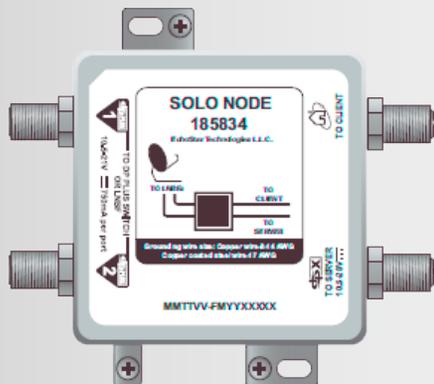
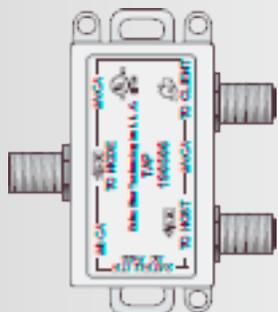
All unused ports must be capped with 75 Ohm Terminators

When using a power inserter, it must be installed before the Node

- Connect ports 2 - 4 on the switch to the Node and port 1 to the power inserter

Install the Hopper at the primary TV location; it supports PiP

Always install, download, and activate the Hopper before plugging in any Joey receivers



### **Hopper**

Hopper host receivers connect to Joey client receivers through Nodes via coaxial cables. Hopper host receivers can share any content with any Hopper or Joey receivers installed in the system.

- Host receiver (main receiver)
- 3 tuners
- 2 Terabyte hard drive (Up to 250 hours of HD program recording)
- Up to three Joey client receivers supported
- Supports PrimeTime Anytime (PTAT)
- Only connects via a TO HOST port (host line)
- HDMI, RCA, and digital audio outputs are supported
- Ethernet port for broadband connectivity is supported
- Uses the 40.0 UHF 2G remote
  - o Colored shortcut buttons for easy menu access
  - o Increased distance and faster communication
- Picture-in-Picture and Blockbuster @Home supported
- USB port can be used for Wi-Fi adapter, external hard drive, or Sling adapter

### **Joey**

Joey client receivers connect to Hopper client receivers through Nodes via coaxial cables. Joey client receivers can request any content from any Hopper installed in the system.

- Client receiver
- Requires a Hopper to work
- Must be paired with a Hopper
- Only connects via a TO CLIENT port (client line)
- Compact size is ideal for placement out of view
- Same user interface as a Hopper
- HDMI, RCA, and digital audio outputs are supported
- Internal remote antenna
- BLOCKBUSTER @HOME supported
- Uses the 40.0 UHF 2G remote
  - o Colored shortcut buttons for easy menu access
  - o Increased distance and faster communication
- Ethernet and USB ports are for future functionality

### **Solo Node**

A Solo Node is the nearest component to the DPP LNBF or DPP switch in the Whole-Home HD DVR system. Nodes manage the transfer of programming between a Hopper and a Joey.

- Requires two DPP satellite inputs
- One Hopper supported
  - o One TO HOST port
- One TO CLIENT port supported
- Can be used to ground the DISH system

### **Duo Node**

A Duo Node is the nearest component to the DPP LNBF or DPP switch in the Whole-Home HD DVR system. Nodes manage the transfer of programming between a Hopper and a Joey.

- Requires three DPP satellite inputs
- Up to two Hopper host receivers supported
  - o Two TO HOST ports
- Two TO CLIENT ports supported
- Can be used to ground the DISH system

### **Tap**

Taps are used to create a host line and client line from a single host line off of a Node. Think of it as creating a line for a Hopper and Joey from a single host line.

- Limited to one Tap per installation
- One TO NODE port supported
- One TO HOST port supported
- One TO CLIENT port supported

### **Splitters**

Standard 2-way or 3-way splitters can only be used on a client line to support multiple Joey client receivers off of a single client line.

Example: Using a 2-way splitter from the TO CLIENT port on a Tap to support two Joey client receivers.

- Only use splitters on client lines
- 2-way or 3-way splitters are supported

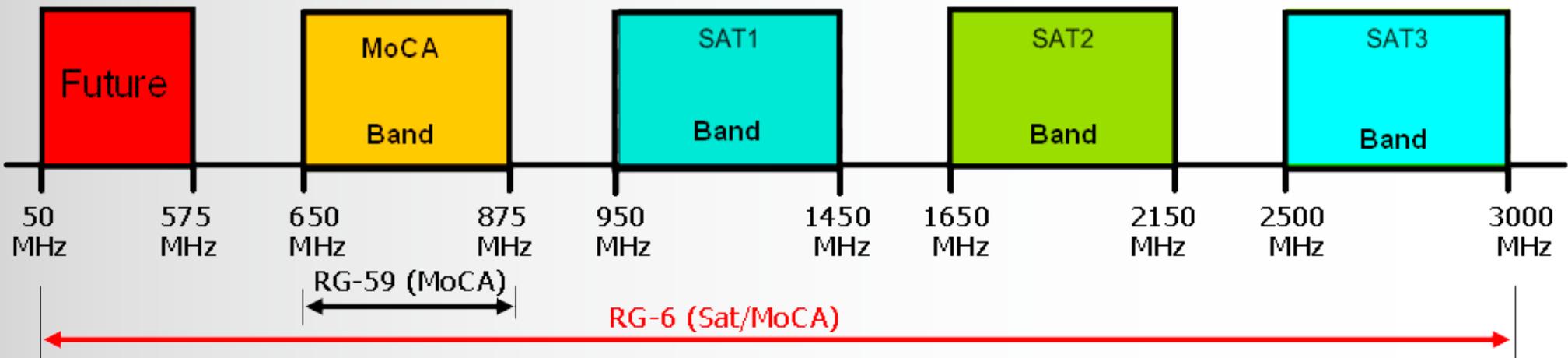
### **75 Ohm Terminator**

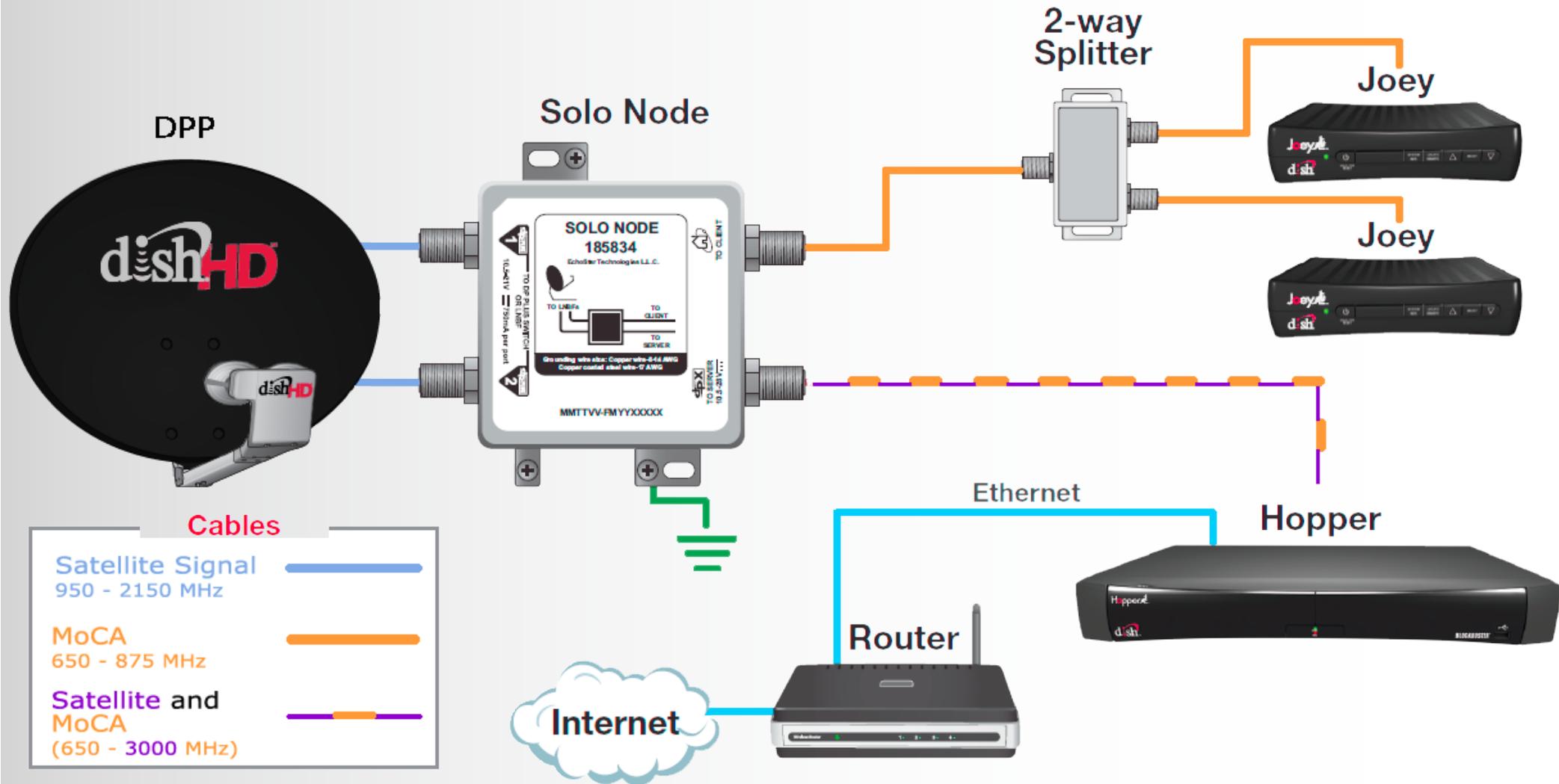
Use 75 ohm terminators on any unused ports in a Hopper Joey System installation to prevent RF leakage or outside RF interference.

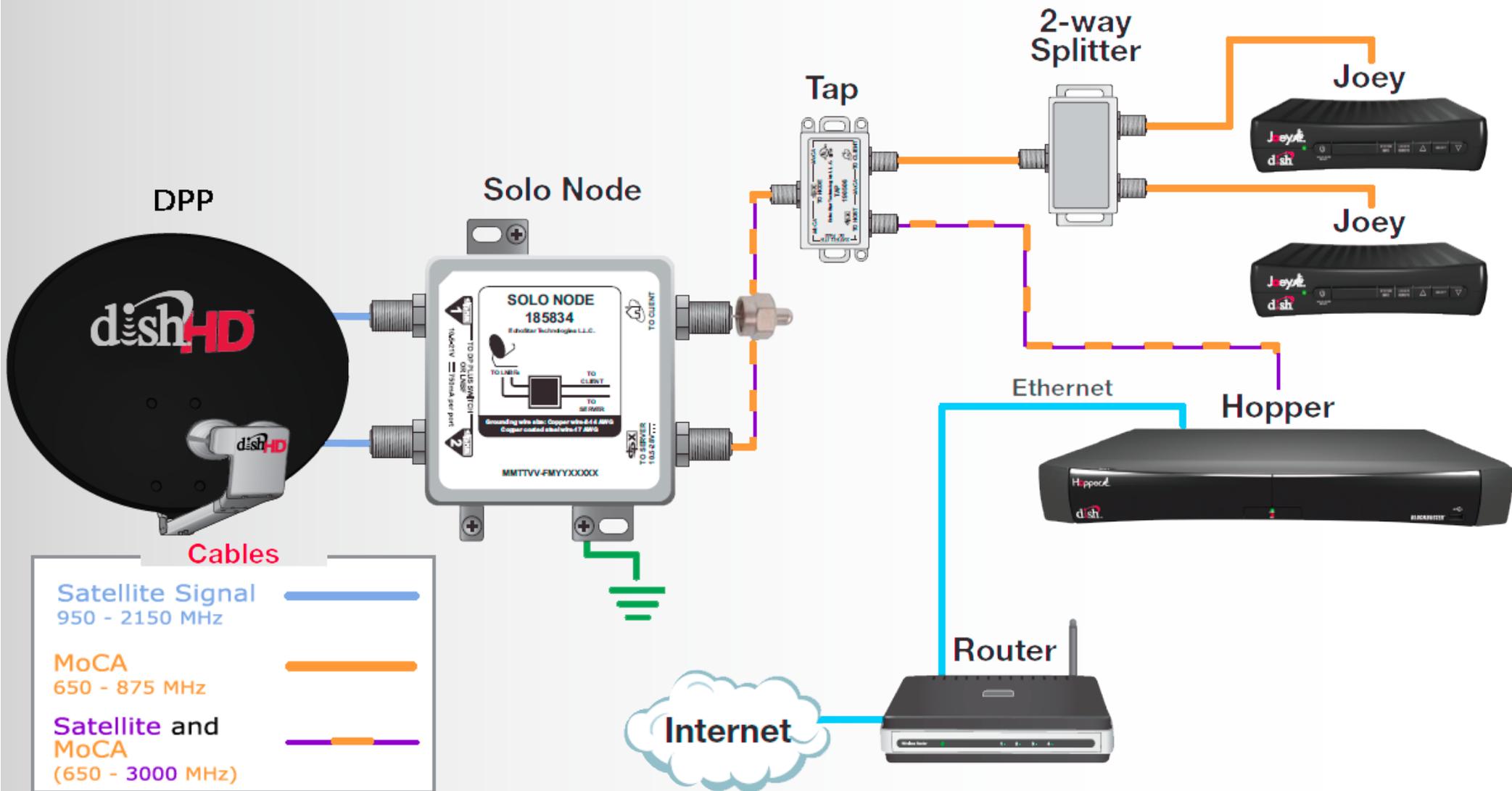
### **Hopper Internet Connector (HIC)**

The HIC makes the Internet connection between the customer's router and the entire Hopper Joey System.

- Only use a HIC on client lines
- One Ethernet port supported
  - o Used to connect to the customer's router
- One Home Video Network port supported
  - o Carries the Internet connection to the entire Hopper Joey System

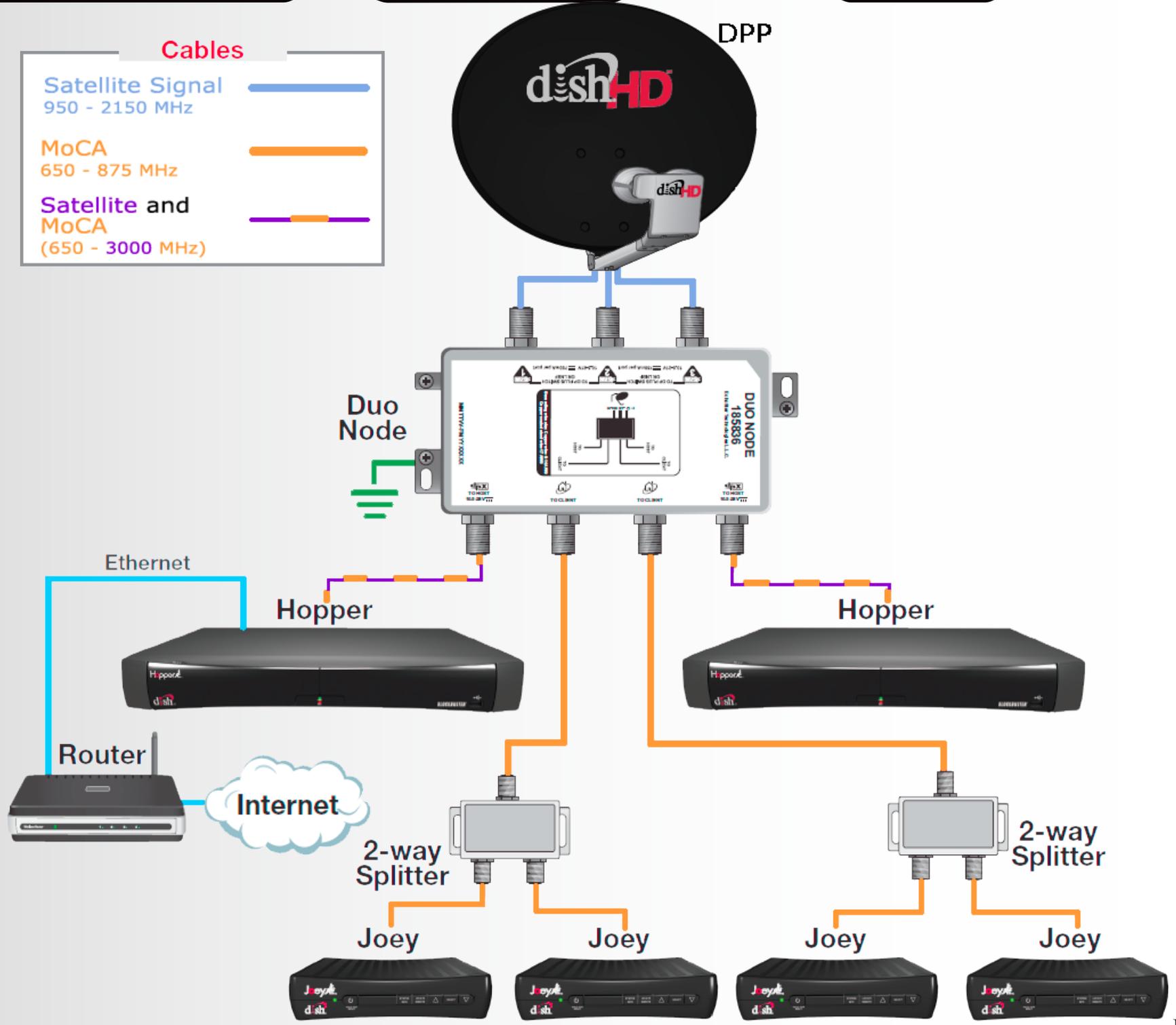






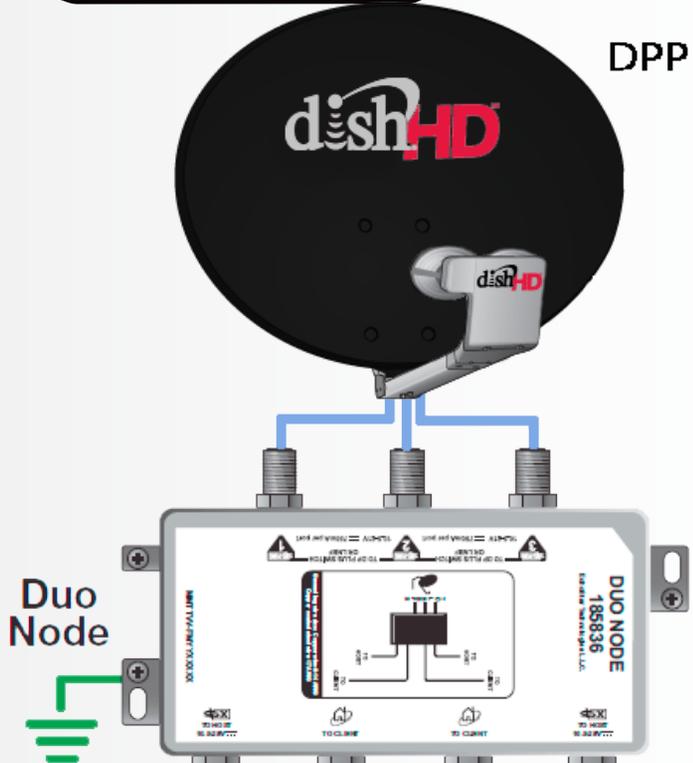
Cables

Satellite Signal 950 - 2150 MHz	
MoCA 650 - 875 MHz	
Satellite and MoCA (650 - 3000 MHz)	



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MoCA 650 - 875 MHz	
Satellite and MoCA (650 - 3000 MHz)	



**Note:** Due to the use of 2 Taps, all cable must be RG-6.





# Duo Node, 2 Hopper, 2 Joey w/ Splitter and DPP Switch w/ optional DP/DPP receiver

