



Innovative Technology Exceptional Quality!

HD Television on Cat 5/6 Cable Cable TV on Cat 5/6 Cable

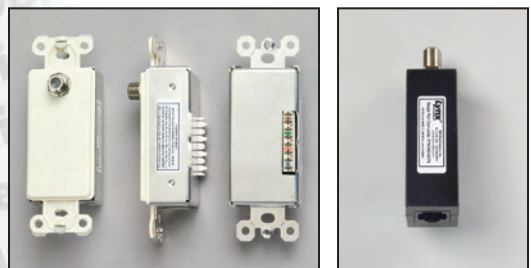


The Lynx® Television Network

- Distributes up to 640 digital channels on Cat 5 or Cat 6 cable
- Excellent for cable TV, SMATV, or off-air television distribution
- Simplifies cabling requirements
- Increases flexibility for moves, adds and changes
- Improves reliability
- Creates a technology bridge to Internet TV and IPTV

The Lynx Television Network simultaneously delivers up to 210 HDTV channels, 640 standard digital channels, or 134 analog channels on Cat 5 or Cat 6 cable. Frequency capabilities are 5 MHz to 860 MHz.

A Lynx hub in the wiring closet converts an unbalanced coaxial signal into eight or sixteen balanced signals transmitted on twisted pair cables. At the point of use a wallplate F or single port converter changes the signal back to coaxial form.



Wallplate F

Single port converter

The Lynx Network simplifies cable requirements by reducing the need for coax. Now television, phone, and data can all be delivered on twisted pair cables. This

simplifies installation, standardizes the wiring, and reduces maintenance requirements.

The Lynx Network increases system flexibility because moves, adds, and changes are easy with Cat5/6 cable.

A homerun wiring design improves reliability because there are no taps or splitters between the distribution hub and the TV.

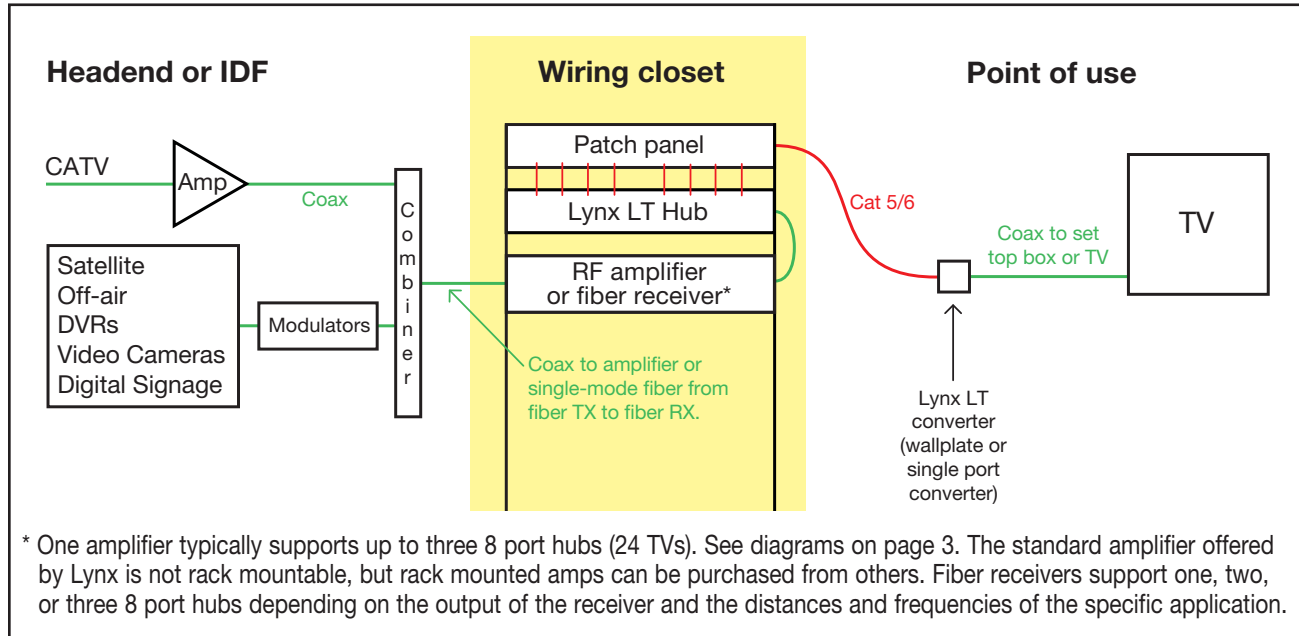
The Lynx Network also provides a “technology bridge” to Internet TV and IPTV by setting up the cabling that these technologies use.

A patented RF balun is the centerpiece of the Lynx design. A pair of send / receive baluns delivers a clean RF signal to each TV (on pair four). The baluns use an RF technology that delivers HD, digital, and analog channels on network cables without using any bandwidth on the network itself.

The hubs and point of use converters do not require power, and are bi-directional. External RF amplifiers compensate for cable and insertion losses.

Applications

For use in hospital, hotel, military, government, corporate, education, MDU, and residential applications.



Equipment Specifications and Options

Frequency range	5 MHz to 860 MHz		Insertion loss for hub and converter¹		<13 dB @ 5 MHz <19 dB @ 860 MHz
Distance capabilities (assumes 45 dB to hub for HD and digital channels and 49 dB to hub for analog channels)	Meters	Feet	Digital channels (1 MHz)	HD channels (3 MHz)	Analog channels (6 MHz)
	90	295	360	120	78
	80	260	470	160	99
	67	220	640	210	134

1. For a free interactive design model that calculates cable and insertion losses and predicts signal strength at the TV e-mail info@lynxbroadband.com.

	Part Number	Width	Height	Depth	Emission Testing
LT hub with rackmount plate					
16 port LT hub ¹	1U 040-0102 ¹	19.0"	1.75"	4.5"	FCC Part 15 Class A
8 port LT hub ¹	1U 040-0101 ¹	19.0"	1.75"	4.5"	FCC Part 15 Class A
LT hub without rackmount (mounts on wall)					
8 port LT hub ¹	040-0090 ¹	6.2"	1.4"	4.5"	FCC Part 15 Class A
4 port LT hub ¹	040-0217 ¹	3.3"	1.2"	3.7"	FCC Part 15 Class A
LC converters					
Single port converter	040-0074	.9"	.9"	3.3"	FCC Part 15 Class A & B
Wallplate F (light almond Decora)	040-0232	Fits in a light almond wallplate ring (PN 809-1663)			
Wallplate F (white Decora)	040-0237	Fits in a white wallplate ring (PN 809-1678)			
Port terminators²	040-0069	.5"	.3"	.9"	NA
12" coax jumper cable	180-0455	connects the single port converter to the F connector on the TV			
Rackmount plates					
16 port (two 8s)	809-1274	19.0"	1.75"	.1"	NA
20 port (five 4s)	809-1647	19.0"	1.75"	.1"	NA
Amplifier¹					
35 dB gain, 870 MHz	180-0488	7.0"	3.9"	10.6"	15dB slope, 42 MHz active return path

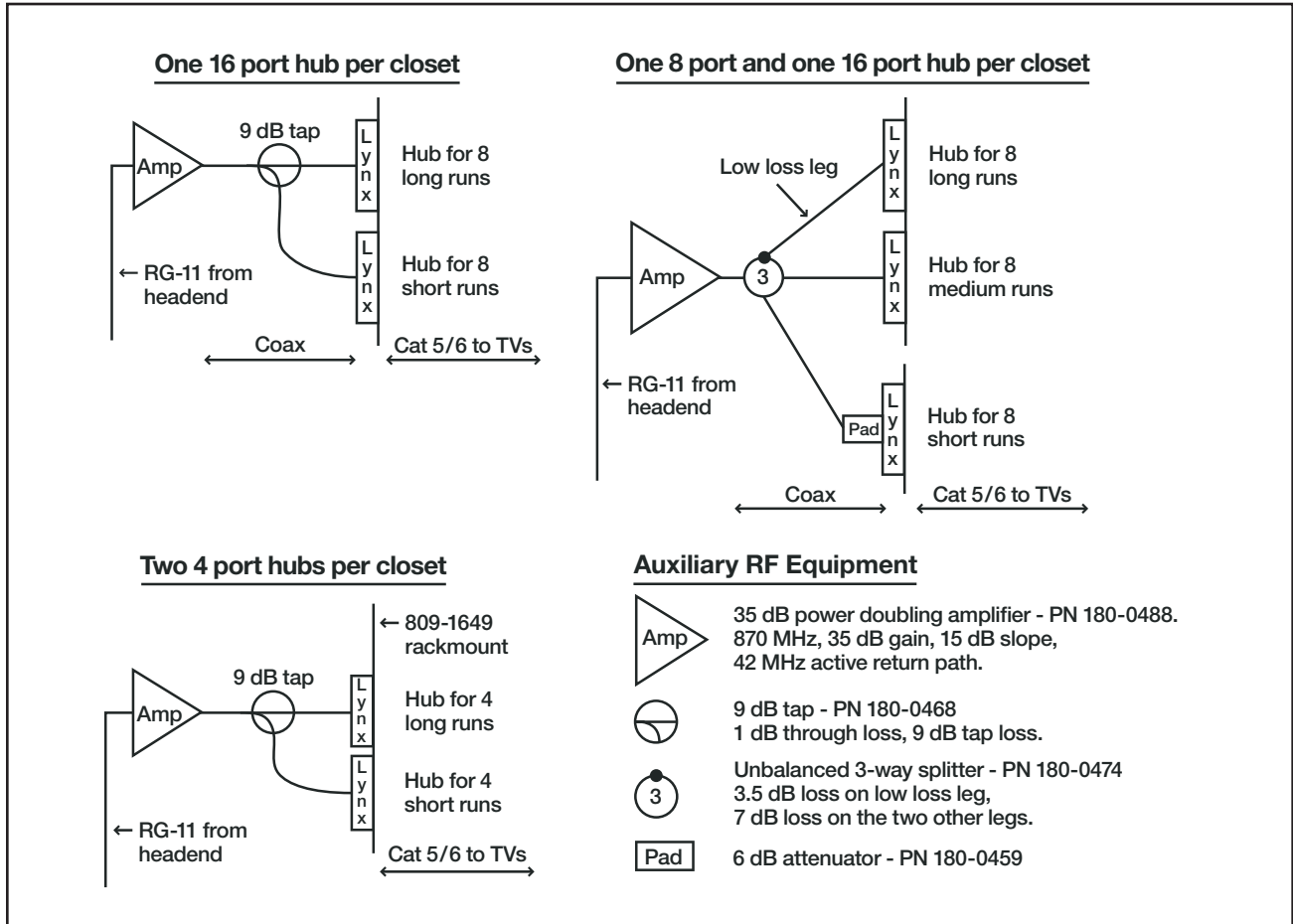
1. Amplification is usually needed upstream of each hub. One amplifier usually serves up to 24 drops in each wiring closet. See diagram on next page.

2. Port terminators are required for all unused ports in order to prevent electromagnetic emissions. An eight port hub serving six TVs has two unused ports that must be terminated.

U.S. patents 5,495,212 5,633,614 6,150,896

System Design Suggestions

One amplifier can usually support up to 24 drops from a given wiring closet, as shown at right below.



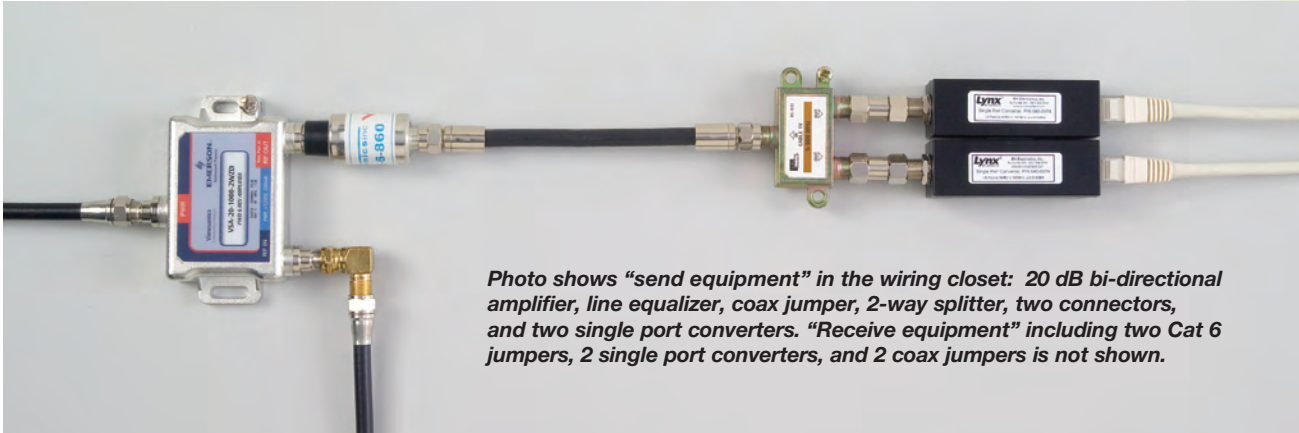
Residential Packages

Residential packages are available for applications with one to four TVs. These packages are capable of delivering the full range of HD, digital, and analog channels. They include a bi-directional amplifier, Lynx converters, connectors, coax jumpers, and patch cords.

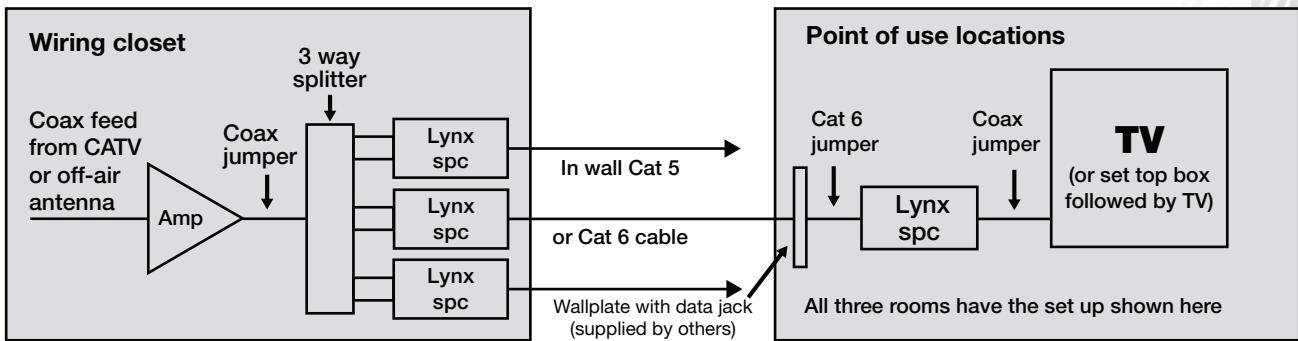
Two types of packages are available. Packages with a 20 dB amp are typically used to deliver “basic” cable TV service with frequencies up to 550MHz. They can also deliver the “channel 3” output from the F connector on a satellite receiver. Packages with a 35 dB amp are typically used to deliver “premium” cable TV packages or off-air television with frequencies up to 860 MHz. The table below shows distance capabilities for each package.

Number of TVs	Part Number	Amp	Distance with basic cable TV (≤ 550 MHz)	Distance with premium cable TV or off-air TV (≤ 860 MHz)	Splitter	Single Port Converters (spc)	4 Port Hub	Cat 5 Jumpers	Coax Jumpers
20 dB packages - typically used for basic cable TV									
1	040-0218	20 dB	≤ 145 ft.	≤ 100 ft.	-	2	-	1	4
2	040-0219	20 dB	≤ 120 ft.	≤ 80 ft.	2 way	4	-	2	5
3	040-0220	20 dB	≤ 105 ft.	≤ 65 ft.	3 way	6	-	3	6
4	040-0221	20 dB	≤ 100 ft.	≤ 60 ft.	-	4	1	4	7
35 dB packages - typically used for premium cable TV and off-air TV									
1	040-0222	35 dB	≤ 210 ft.	≤ 155 ft.	-	2	-	1	3
2	040-0223	35 dB	≤ 185 ft.	≤ 135 ft.	2 way	4	-	2	4
3	040-0224	35 dB	≤ 170 ft.	≤ 125 ft.	3 way	6	-	3	5
4	040-0225	35 dB	≤ 165 ft.	≤ 120 ft.	-	4	1	4	6

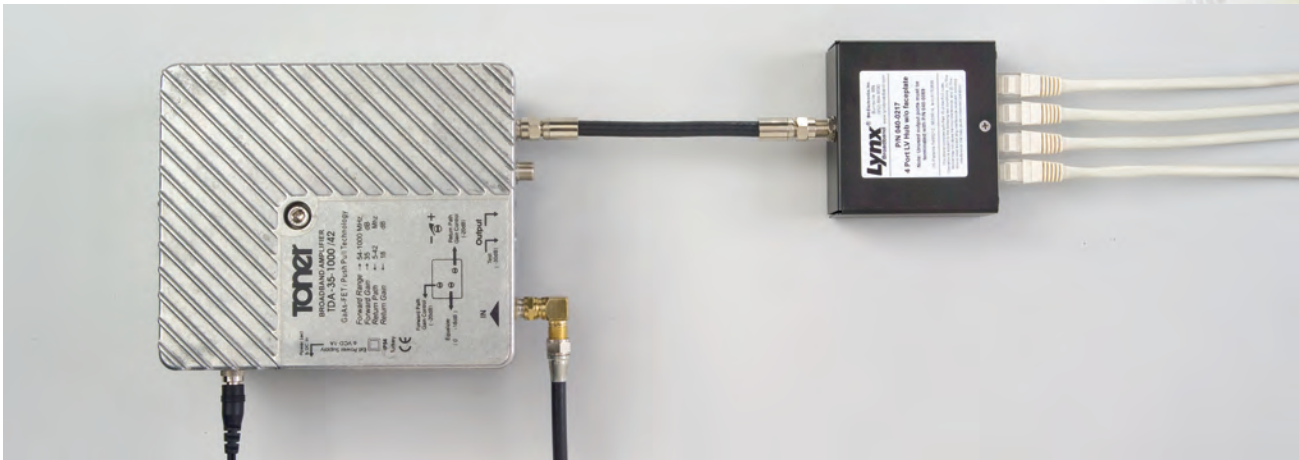
Residential Configuration for Two TVs with a 20 dB amp



Residential Configuration for Three TVs



Residential Configuration for Four TVs with a 35 dB amp



Purchase from Multicom  www.multicominc.com | 800-423-2594

ISO 9001 Certified Quality System

Lynx[®]
Broadband