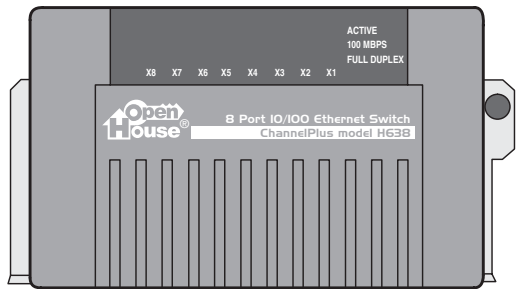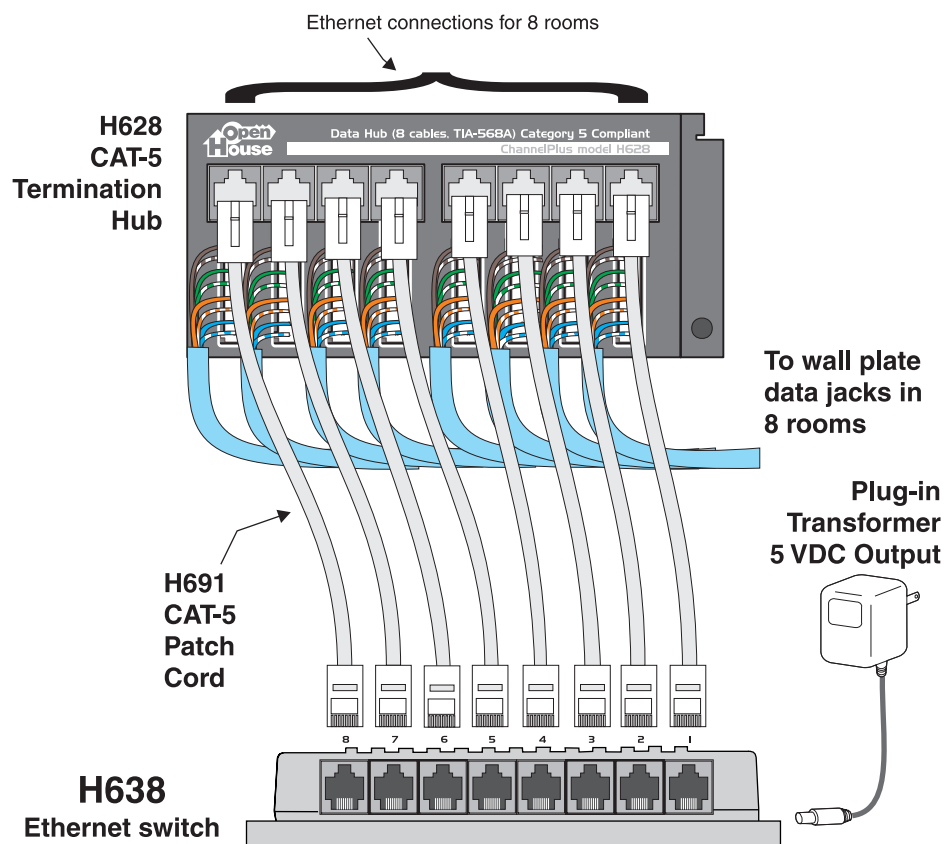# OpenHouse® Ethernet Switch

The H638 10/100 ethernet switch creates a home network between up to eight computers. "Plug and play" installation is easy when using the H628 data hub. The H638 is IEEE 802.3u 100 Base-TX Fast Ethernet compliant, IEEE 802.3 10 Base-T compliant and has activity LEDs for network status and diagnosis. The H638 shares an MDI "uplink" port with Port 1 to expand the network using additional H638 units for systems with more than eight devices.

OpenHouse® modules attach from the top

1) Hook from the top
2) Swing into place
3) Push button to lock

Typical Installation

Ethernet connections for 8 rooms

H628 CAT-5 Termination Hub

To wall plate data jacks in 8 rooms

Plug-in Transformer 5 VDC Output

H691 CAT-5 Patch Cord

H638 Ethernet switch

Wiring the H638 Switch
- Use only Category 5e unshielded twisted-pair cable for maximum performance.
- When connecting to an H628 or a network device directly, use straight through or crossover RJ-45 cables. All ports will automatically detect the cable type.
- Each run to a network device should be less than 100 meters (328 feet).

LED Indicators
- **ACTIVE** lights are on when a network device is connected and flash when data is transmitted or received. The lights are off when a port is not connected.
- **FULL DUPLEX** lights are on when a port is in full duplex mode. The lights are off when a port is in half duplex mode and flash when a collision occurs. Although some collisions are normal, too many collisions may indicate a problem such as a faulty cable or connection.
- **100 MBPS** lights are on when a port is in 100 Mbps mode. The lights are off when the port is in 10 Mbps mode.
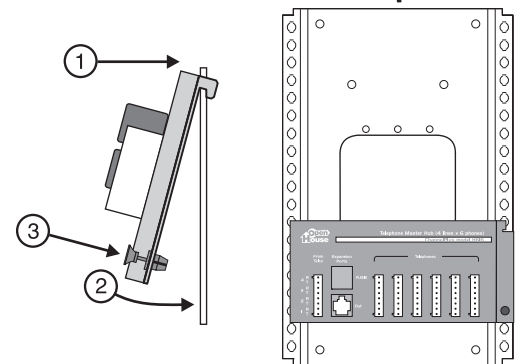
Specifications: Typical @ 25°C ± 5°C — H638

Specifications: Typical @ 25°C ± 5°C		H638
Compliance	IEEE 802.3u IEEE 802.3	100 Base-TX, 10 Base-T and N-way auto-negotiation
Network Interface	RJ-45 ports	8
	RJ-45 MDI uplink	Port 1
Max Cable Length	CAT-5e (UTP)	100 meters (328 feet)
LED Indicators	each port	ACTIVE, 100 MBPS, FULL DUPLEX
Environmental	operating temperature	0°C to 55°C
Power Supply	output current	800mA maximum
	output voltage	5 VDC
	input power	120 VAC

Expanding the Network

Use one of the ports on the first H638 and connect to the expansion H638 using its MDI "uplink" Port 1. See below for special instructions.

H638 Ethernet switch

Connect to 7 network devices or to the MDI "uplink" Port 1 of additional H638 switches.

Connect a port to the MDI "uplink" Port 1 on the H638 expansion switch.

H638 Ethernet switch (expansion)

Port 1

Connect to 7 network devices or to the MDI "uplink" Port 1 of additional H638 switches.

Using more than one switch
- Use only Category 5e unshielded twisted-pair cable for maximum performance.
- When connecting two switches, use a straight through or crossover RJ-45 Category 5e cable. Category 5 patch cords may be used for short interconnections.
- The cable length between any two switches cannot exceed 100 meters (328 feet).
- Additional switches may be used as long as the path between any two network devices does not exceed four switches and five cables.
- All switches used must be powered.

Declaration of Conformity

Open House ® Compatible

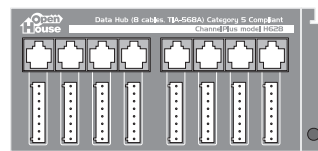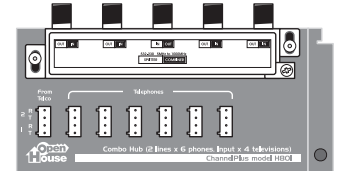# OpenHouse® Enclosures, Modules, Accessories & Wall Plates

Service center enclosures

A full line of OpenHouse® compatible enclosures, from simple, inexpensive mounting plates to high capacity in-wall cabinets. AC outlets can be mounted inside the cabinets.

Starter systems

RF splitters and telephone punch downs. When it is time to upgrade, just snap this module out and replace with one or more of the more sophisticated units.
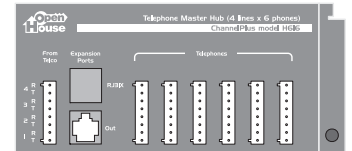
Data hubs

Termination blocks for the CAT-5e cables, Ethernet switches. Bring the Internet to any room in the home. Or create a home data network.

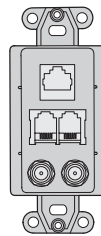## Telephone hubs

Connections for 1-4 phone lines to every room. Starter hub adds RJ-31X jack for security system dialer.
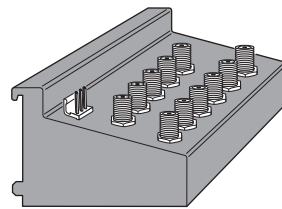
Wall plates

Wall plate systems for all rooms. The typical room gets TV and telephone. The home office wall plate adds data ports. The media center wall plate adds satellite feeds.
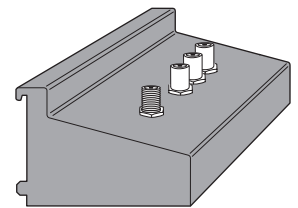
Coax panels

Distribute antenna or cable TV to every room of the house. Some models include bi-directional amplifiers for interactive cable systems. Some models include modulator inputs and IR engines.

AV modulators (for service center)

Create a new TV channel for a front door camera. Some models feature Cat-5 input connections.
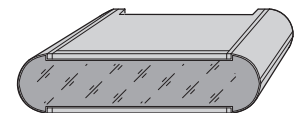
AV modulators (for media center)

Create new TV channels for DVD, VCR, or a satellite receiver. These modulators sit in the media center. Some offer true MTS stereo.

IR Accessories

Control video devices from any room.

New OpenHouse® products are added all the time.
Visit our website to learn more:
www.openhousesystem.com

Wiring a house for OpenHouse®

The cables in an OpenHouse® run from the various rooms of the house directly to the service center location. (This is known as "home run" wiring.)

Two types of wire are used for communication and entertainment: Cat-5, 4-UTP (4 Unshielded Twisted Pairs) wire handles data or 1 to 4 telephone lines. RG-6 coax handles television (antenna or cable), satellite dish, cable modem, or AV modulator signals. (An AV modulator creates new TV channels for front door camera, DVD player, a VCR or a satellite receiver.)

We recommend the following pre-wire schemes. Run these wires from the service center to the rooms indicated.

	Typical Room		Media Center		Home Office	
Good	1 Cat-5	1 RG-6	1 Cat-5	3 RG-6	1 Cat-5	2 RG-6
Better	1 Cat-5	1 RG-6	2 Cat-5	3 RG-6	2 Cat-5	2 RG-6
Best	2 Cat-5	2 RG-6	3 Cat-5	3 RG-6	3 Cat-5	2 RG-6

Good …
Typical room - phone, TV
Media center - phone, satellite receiver, AV modulators
Home office - phone, TV, cable modem

Better …
Typical room - phone, TV, ethernet
Media center - phone, TV, ethernet, satellite receiver, AV modulators
Home office - phone, TV, ethernet, cable modem

Best …
Typical room - phone, TV, ethernet, satellite receiver
Media center - phone, TV, ethernet, satellite receiver, AV modulators, hi-speed data
Home office - phone, TV, ethernet, satellite receiver, cable modem, hi-speed data

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Ethernet Switch
Model H638

OpenHouse ®

Linear LLC

2055 Corte Del Nogal, Carlsbad, CA 92009, USA
760-438-7000   800-999-5225   fax: 760-931-1340
www.openhousesystem.com
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