Digital ADSL Regenerator (DAR)
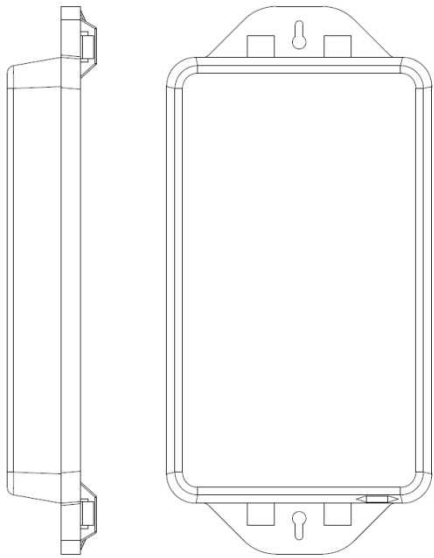
DSLAM Repeater

Infinite Reach ADSL

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DAR Purpose

- Loop Extenders operate by analog amplification, but there is a limit to the total distance that can be reached.

- Digital Regenerator returns the signal to its original digital state then regenerates the transmission signal.

- Increases range and allows signal to be repeated as many times as needed, no limits.
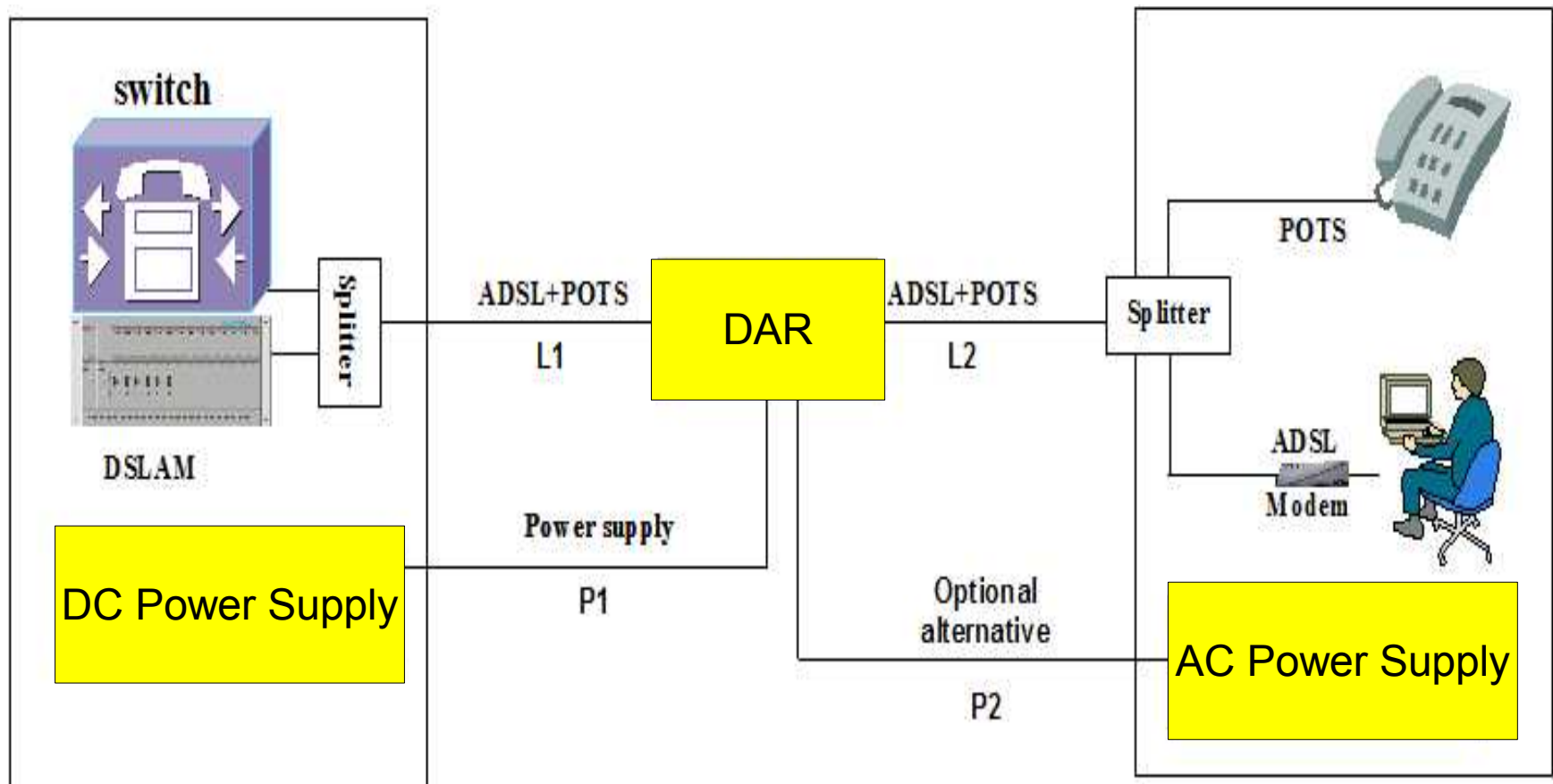
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DAR Benefits

- DSLAM alternative
- No need for fiber or local power
- More cost effective in low density areas
- Infinite Reach ADSL – no subscriber left behind
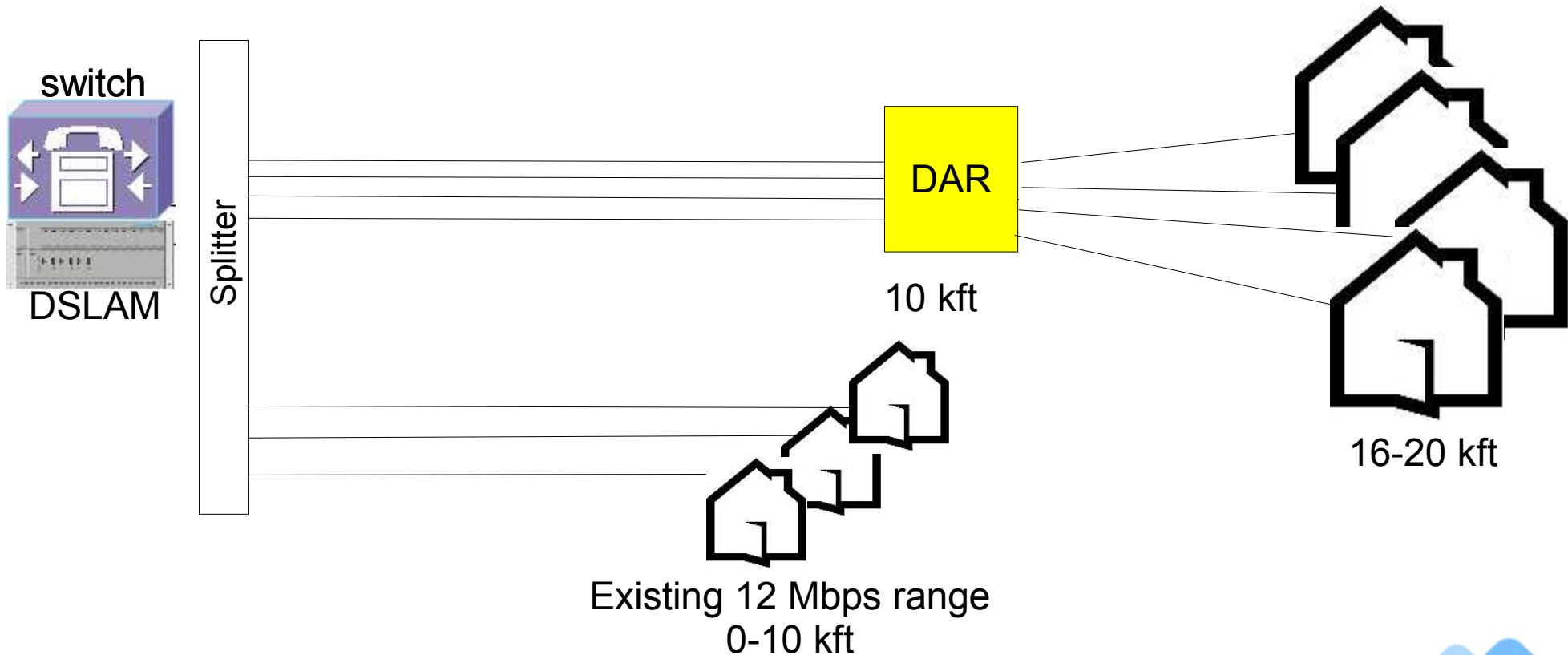- Any bandwidth available at any distance

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DAR

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Architecture

ipTV
12 Mbps

(24 AWG)

switch

DSLAM

Splitter

DAR

10 kft

Existing 12 Mbps range
0-10 kft

16-20 kft

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Meeting CAF Standards
4 Mbps down / 1 up

(24 AWG)

switch

DSLAM

Splitter

DAR

16 kft

Existing 4/1 range
0-16 kft

25-32 kft

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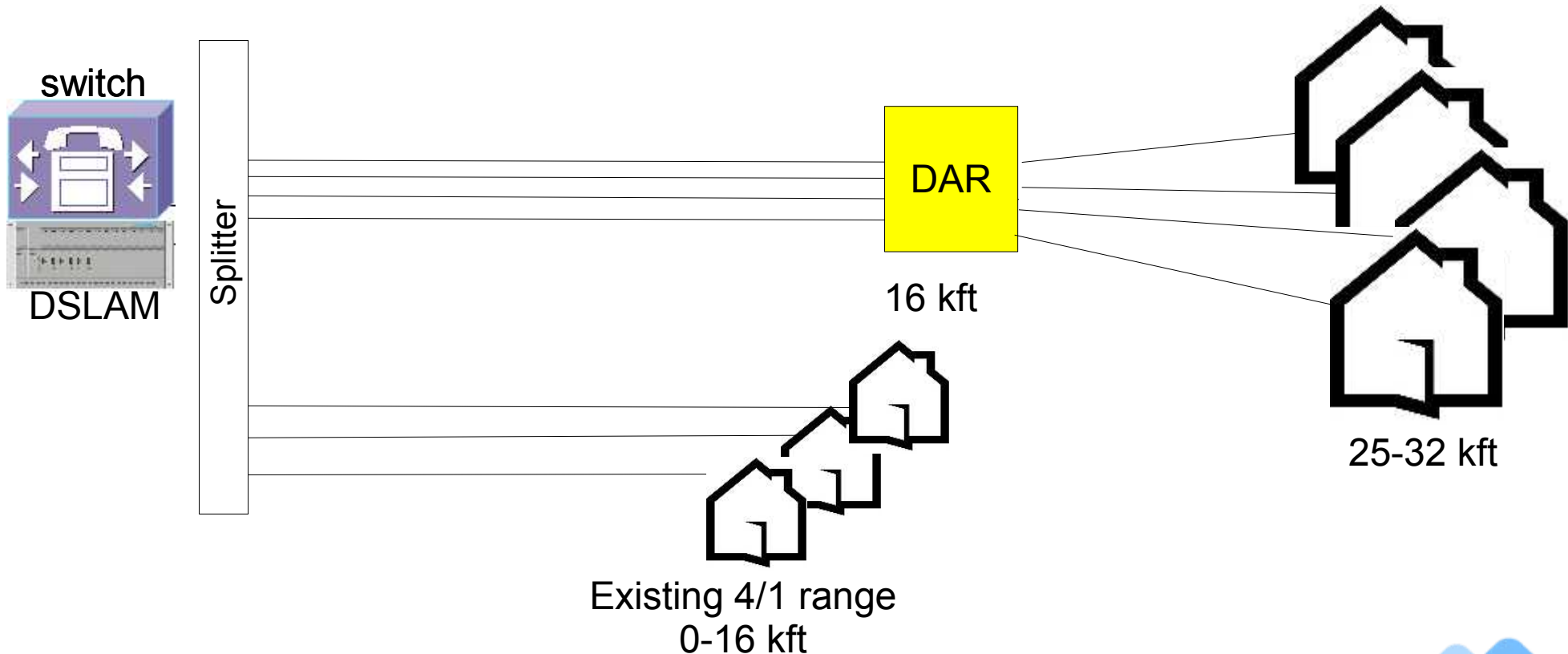
Extending your existing Service Area

(24 AWG)

switch

DSLAM

Splitter

LE

10 – 16 kft

DAR

16-26 kft

26-46 kft

Existing subs
At 0-20 kft

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Infinite Reach

(24 AWG)

switch

DSLAM

LE   DAR   DAR   DAR

16 kft   27 kft   49 kft   70 kft

90kft and beyond

Existing subs
At 0-20 kft

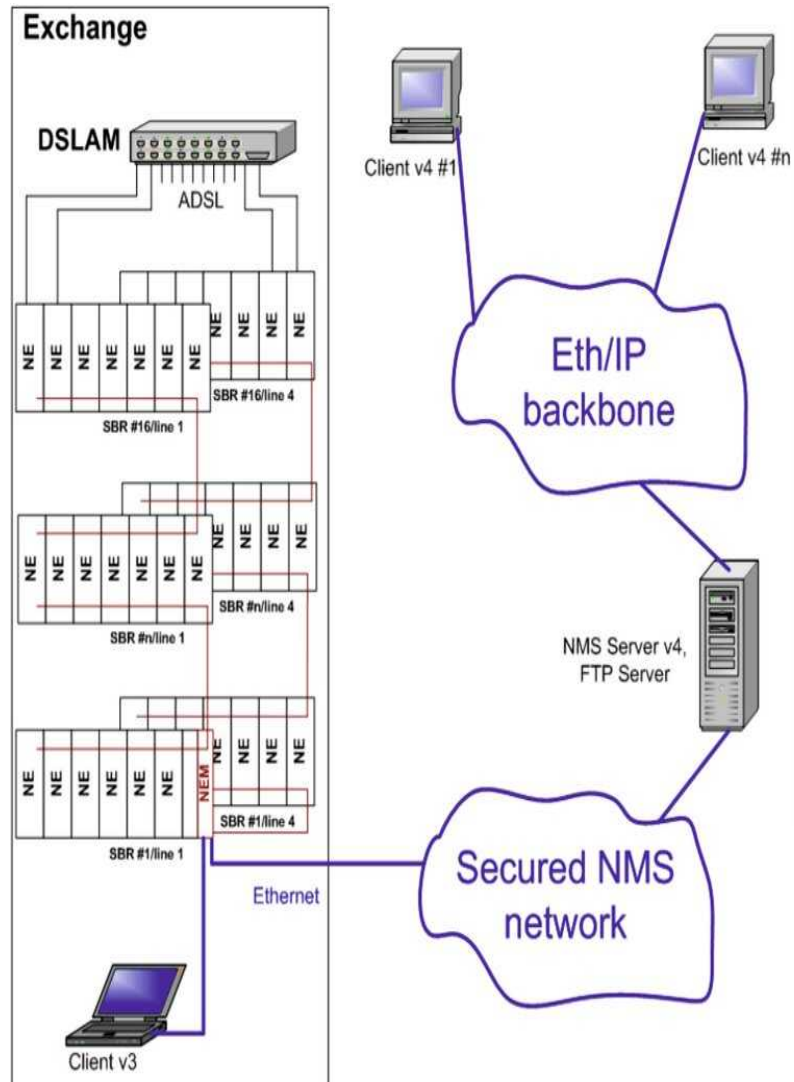Strowger
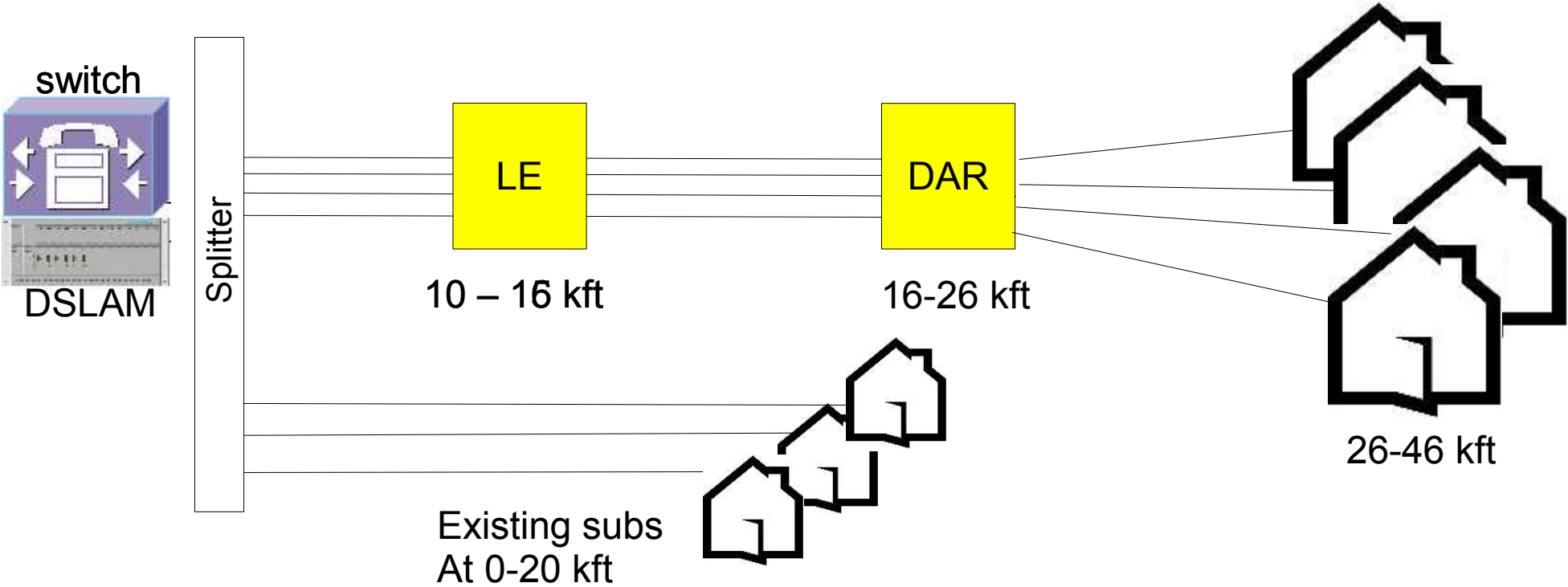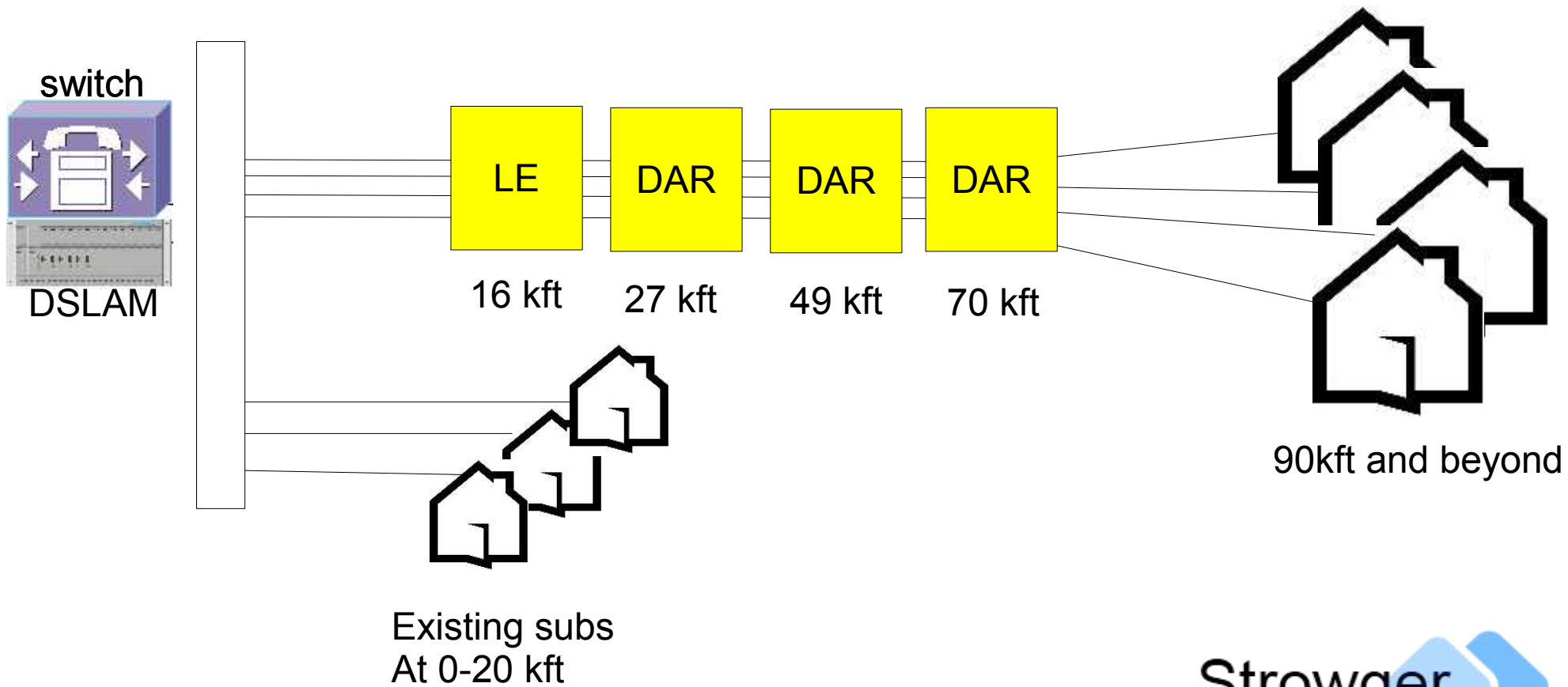
Where to install Regenerator?

Beyond your ADSL serving area!

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DAR Specs

- 4 ports

- Requires one 310vDC power pair or two 155vDC power pairs

- Power provided by Network Management System or by AEC power supplies.

- 2.6 Watts per subscriber + 2.8 Watts

- Power reach 1400 ohms for 4 subscribers

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Optional Power and Management System

Optional Power and Management System

- Full configuration and monitoring control.

- RACK – 19 inch, 14 slots, 48vDC input

- Power Card – 4 power supplies per card, 165vDC or 330vDC output.

- Network Management Card – 100BaseT connection to your internal network

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One Family

Product	Benefits		
ADSL Loop Extender	40% distance improvement	Line Power optional	$150-$250 per subscriber
Digital ADSL Regenerator	100% distance improvement, infinite reach	Line Power not available	$350 per subscriber

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Price List – Unmanaged System

AEC-B1PH-D48 qty 2	Power Supply	$ 90
DAR420-4P-LE DAR420-4P-DSLAM	Digital ADSL Regenerator (DAR), 4 Port With custom pre-configuration	$ 920.30

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Price List – Managed System

DAR-NEM	Network Management Control Card	$ 454.86
DAR-R4P	Express Power Card for Mgt Sys	$ 476.02
DAR-RACK	19" Rack for management system	$ 444.28
DAR420-4P	Digital ADSL Regenerator (DAR), 4 Port	$ 899.14

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Advanced Uses
Loop Extender Mode

One product
two operation modes

DSLAM mode –

- Uses full ADSL power, just like a DSLAM.

- Any ADSL that passes this regenerator point must go through the regenerator.

- Improves reach by 100%.

- This is the **DEFAULT** config.

Loop Extender mode-

- Uses a reduced power level friendly to other services on adjacent pairs.

- Compatible with other services on adjacent pairs.

- Improves reach by 60%.

- Requires custom configuration

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Loop Extender Mode

- DAR420-4P-LE $920.30 with custom pre-configuration

- Must be configured specifically for the installation point. Tell us the dB loss at the installation point when you order.

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Thank You

- Strowger, Inc.
- www.strowger.com
- Office number: (816) 272-1826

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Footnotes

- In LE mode L2 < 0.6 x L1

- Maximum aggregate downstream throughput is 52 Mbps

- To predict performance in LE mode use bandwidth estimator ipTV column

- To predict performance in DSLAM mode break the circuit in two and use bandwidth estimator 'no extender' column to estimate both L1 and L2.

- In August, a new autoPSD (auto gain) feature will eliminate the dB pre-configuration requirement

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