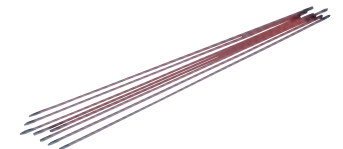
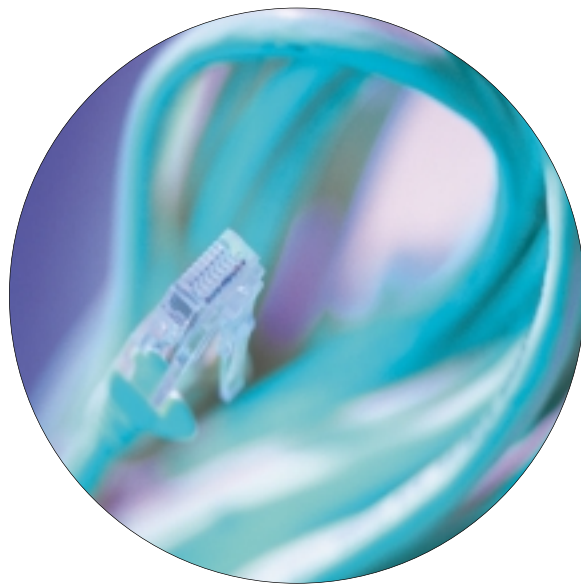


Planning makes the job run smoothly. When you count on your tools to help you make money, count on the best value and highest quality available, Paladin Tools. For video, voice or data cable systems, you can rely on Paladin to provide the tool, the solution and the information.

On the following pages you'll find some technical information for cable assembly and tool suggestions for different types of jobs. You can choose a complete solution in one of our kits or a specific tool to get the job done right.

Look for these planning aids in this section:

- Data network cable assembly and pair wiring
- Coaxial cable assembly
- Telephone cable assembly





Tool Solutions

Paladin Tools sells solutions. For every step in the coax, data or fiber optic application that you are working on, we have the tool designed for the job. Our economical tools are perfect for those technicians just starting out or the MIS manager's occasional use. Our professional tools are designed and manufactured to handle daily use for years.

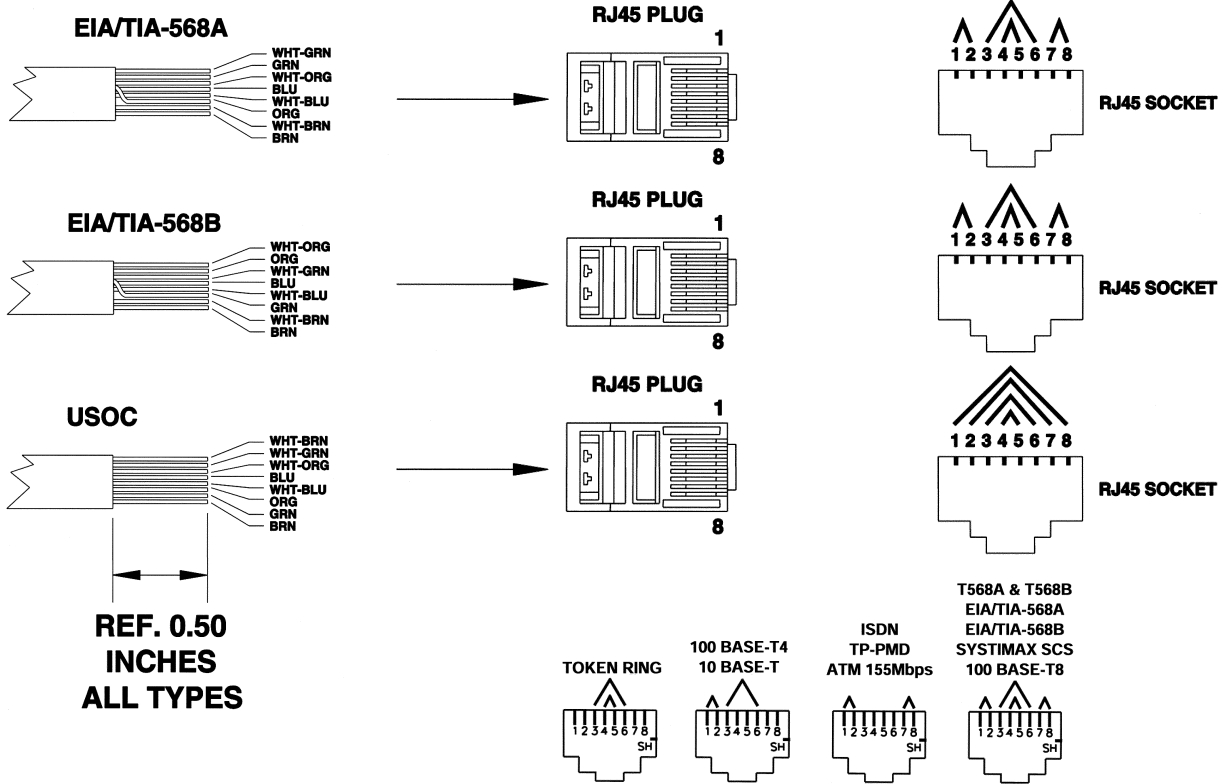
Our kits are a convenient way to get the right tools for the application to the job site. Zippered fabric or hard sided, our kits hold the tools and the accessories that you need to do the job.

- Data network cable assembly and pair wiring
- Coaxial cable assembly
- Telephone cable assembly
- Industrial cable assembly
- Electrical cable assembly

Benefits of Being A Paladin Distributor

1. Dedicated customer focus throughout all factory teams
2. Regional sales managers, local sales reps and sales/promotional materials to support you
3. Highest-quality products at reasonable prices
4. Strong brand recognition and reputation
5. No-hassle returns
6. Quick engineering development for new and custom products
7. Flexibility to develop custom tool kits
8. Fast order processing and shipping
9. Sales leads from advertising and trade shows
10. No minimum order

Data Network Cable Assembly Instructions



Technical References: Use the configuration listed below for required network type

Cabling and Network Scheme	Configuration Type
Category-1, out-dated, no criteria	EIA/TIA-568A or EIA/TIA-568B
Category-2, to 1Mhz (CAT-2)	EIA/TIA-568A or EIA/TIA-568B
Category-3, to 16Mhz (CAT-3)	EIA/TIA-568A or EIA/TIA-568B
Category-4, to 20Mhz (CAT-4)	EIA/TIA-568A or EIA/TIA-568B
Category-5, to 100Mhz (CAT-5)	EIA/TIA-568A or EIA/TIA-568B
Enhanced Category-5, to 300Mhz (CAT-5E)	EIA/TIA-568A or EIA/TIA-568B
Category-6, to 300Mhz (CAT-6)	EIA/TIA-568A or EIA/TIA-568B
Ethernet 10 Base-T	EIA/TIA-568A or EIA/TIA-568B
100 Base-T	EIA/TIA-568A or EIA/TIA-568B
1000 Base-T	EIA/TIA-568A or EIA/TIA-568B
ISDN	EIA/TIA-568A
USOC 10 Base-T	USOC
AT&T 258A	EIA/TIA-568B
100 Base-T4	EIA/TIA-568B
100 Base-T8	EIA/TIA-568B
ATM 155Mbps	EIA/TIA-568B
TP-PMD	EIA/TIA-568B
100VG-AnyLAN	EIA/TIA-568B
Token Ring	EIA/TIA-568A or EIA/TIA-568B
Systemax SCS (AT&T)	EIA/TIA-568B

Data Network Cable Assembly Instructions-continued

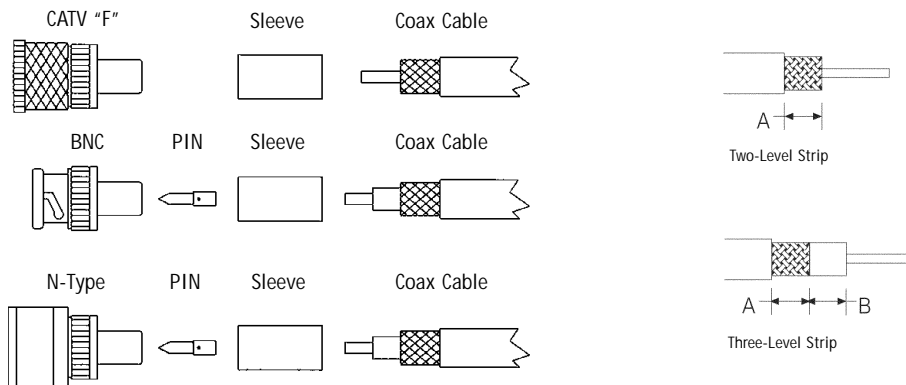
Recommended Tools:

1. Jacket Stripper, Scissors, Crimping Tool

Network Cable Assembly Instructions:

1. Strip 1 or 2 inches of the outer jacket off the cable. Do NOT strip the insulation off the inner wires. Be sure you do not score the jacket off the inner wires when stripping off the outer jacket.
2. Untwist the paired wires.
3. Configure the wire scheme by the color code for the network type you are installing.
4. Ensure all the wires are straight in line and not staggered.
5. Use scissors to trim the wires to 1/2 (0.50) inches. Make sure all wires are of same length and in a straight line.
6. Grip the wires and jacket joint between thumb and forefinger to hold steadily together. Gently slide the wires into the RJ45 plug until they begin to "track" in the inner channels of the connector.
7. Push the wires all the way in the connector until the front of the wires butt against the front of the connector. A visual inspection of the front end of the connector should show the copper tips if wires are completely inserted.
8. Install cable/connector assembly into the crimp tool and crimp until all pins are set. All pins should be fully compressed and of equal height after crimping.

Coaxial Cable Assembly Instructions



Recommended Tools:

Coaxial Cable Stripping Tool and Coaxial Connector Crimp Tool

Assembly Instructions for Three-piece BNC, TNC, N-type, and C-type Coaxial Connectors:

1. Refer to the connector manufacturer's specification and data sheets for the required strip dimensions and crimp size required to select the proper tools for use. The connector manufacturer specifies the sizes, not the cable or connector type.
2. Set-up the coaxial stripping tool to perform the proper strip of the outer jacket, shield, and inner dielectric as required by the connector manufacturer.
3. Strip the coaxial cable.
4. Slide the sleeve of the coaxial connector over the cable.
5. Ensure the center conductor length is accurate per the manufacturer's specification.
6. Attach the pin to the center conductor.
7. Crimp the pin using the proper crimp size in the crimp tool as specified by the connector manufacturer.
8. Flare the braided shield outward away from the dielectric.
9. Slide the connector shell over the pin and dielectric. The end of the connector should slide under the braided shield. The connector should "snap" into place when the pin is seated properly into the connector.
10. Slide the sleeve over the braided shield and connector end.
11. Crimp the sleeve using the proper crimp size in the crimp tool as specified by the connector manufacturer.

Coaxial Cable Assembly Instructions-continued

Recommended Tools:

Coaxial Cable Stripping Tool and Coaxial Connector Crimp Tool

Assembly Instructions for Two-Piece BNC, TNC, N-type, C-type and CATV "F" Coaxial Connectors:

1. Refer to the connector manufacturer's specification and data sheets for the required strip dimensions and crimp size required to select the proper tools for use. The connector manufacturer specifies the sizes, not the cable or connector type.
2. Set-up the coaxial stripping tool to perform the proper strip of the outer jacket, shield, and inner dielectric as required by the connector manufacturer.
3. Strip the coaxial cable.
4. Slide the sleeve of the coaxial connector over the cable.
5. Flare the braided shield outward away from the dielectric.
6. Slide the connector shell over the center conductor and dielectric. The end of the connector should slide under the braided shield. The connector should "snap" into place when the center conductor is seated properly into the connector.
7. Slide the sleeve over the braided shield and connector end.
8. Crimp the sleeve using the proper crimp size in the crimp tool as specified by the connector manufacturer.

Recommended Tools:

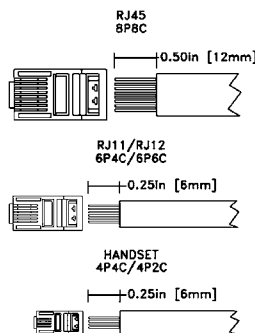
Coaxial Cable Stripping Tool and Coaxial Connector Crimp Tool

Assembly Instructions for One-Piece CATV "F" Coaxial Connectors:

1. Strip 1/4 inch (0.25 inches) off the outer jacket exposing the braid. The center conductor should be approximately 1/4 inch (0.25 inches) out from the dielectric as well.
2. Flare the braided shield outward away from the dielectric.
3. Slide the connector shell over the center conductor and dielectric. The end of the connector should slide under the braided shield.
4. Crimp the sleeve using the proper crimp size in the crimp tool as specified by the connector manufacturer.

Note: For some CATV "F" connectors, it is necessary to fold the braid back over the jacket. Contact the connector manufacturer to see if folding back the shield is required.

Telephone Cable Assembly Instructions

**To assemble telephone cable:**

1. For 4- and 6-pin connectors, strip approximately 1/4" of the outer insulation off the cable. For 8- and 10-pin connectors, strip approximately 1/2" of the outer insulation off the cable.
2. Do not strip the insulation off the internal wires.
3. For flat cables, slide the wires into the connector. Make sure the wire ends are butting against the very front edge of the connector and that all wires are located under the pins.
4. For round cable (twisted pair), arrange the wires in pairs based on the color. Verify the wiring pin-out required for the system. Typically pairing is either 1-to-1, or is paired for pins 1 & 2, 3 & 6, 4 & 5, and 7 & 8 (for EIA standard). The equipment connecting to the cable determines the wiring pin-out.
5. When the wires are arranged for the correct pin-out, slide the wires into the connector. Make sure the wire ends are butting against the front edge of the connector.
6. Install the cable/connector assembly into the crimp tool. Crimp the connector to force the pins into the wires and to engage the strain relief on the cable. All pins should be the same height and fully seated.

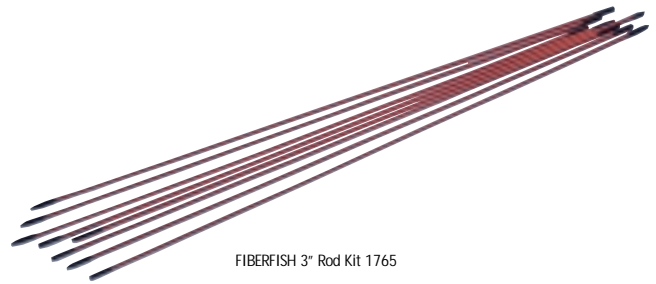


Tools developed by cable installers for installers— FIBERFISH cable installation products are versatile, easily transportable and quick to put into action.



FIBERFISH TelePole 1750

FIBERFISH Carrying case 1751



FIBERFISH 3' Rod Kit 1765

TelePole

New Telescopes to 20' in seconds. Easy to handle in tight spots. Sections lock securely even if not fully extended, *won't collapse!* Push/pull wires over long spans, suspended ceilings, sub-floors, crawl spaces & attics. Made of aircraft quality aluminum (insulated handle). Sturdy and lightweight. Push/pull hook included. The Tele-Pole is 72" long.

- One-year warranty

Technical	
Weight	4.2 lbs.
Length	72"

Ordering	Part Number
FIBERFISH TelePole	1750

Carrying case

New Heavy duty black ABS molded plastic. Designed to hold the TelePole, 6' or 3' FIBERFISH rods and accessories. Minimum length is 63" and will extend to 87". Long handle for carrying comfort. Top is foam padded. Lockable.

- One-year warranty

Technical	
Weight	6 lbs.
Length	63"

Ordering	Part Number
FIBERFISH Carrying case	1751

FIBERFISH Rod Kits

New The FIBERFISH (3/16" orange rods) are non-conductive fiberglass rods available in 3' or 6' sections. Rods can be screwed together to make longer lengths for fishing wire in existing walls and attics or across drop ceilings or under carpet. With a variety of attachments*, it makes fishing wire easy!

The FIBERFISH 6' Rod Kit (P/N 1752) contains five interconnecting fiberglass rods with bullnose tip. The FIBERFISH 3' Rod Kit (P/N 1765) contains eight interconnecting fiberglass rods with bullnose tip.

- Simple to use for beginners and professionals
- Made in USA of quality materials
- As with all tools, safety glasses are recommended
- Comes in rugged, clear tube for storage
- One-year warranty

* Bullnose tips included, other attachments sold separately. See next page for details.

Ordering	Weight	Part Number
FIBERFISH 6' Rod kit	1.6 lbs.	1752
FIBERFISH 3' Rod kit	1.2 lbs.	1765



FiberSnake

New Our FiberSnake has a fiberglass reinforced composite core jacketed in rugged plastic coating to ensure long life, high flexibility, and no splinters! Offered in a PVC storage case in the 25' and 40' version, the 100' FiberSnake comes in a steel cage with a hand operated brake. All FiberSnakes have a bull-nose at each end so wires can be pulled from either direction. Unlike our FIBERFISH rods these rods can be used in conduit.

■ One-year warranty

Technical/Ordering	
25' FiberSnake in PVC sleeve	
Weight	2 lbs.
Dimensions	18"
Part Number	1753

40' FiberSnake in PVC sleeve	
Weight	2 lbs.
Dimensions	18"
Part Number	1754

100' FiberSnake on wire reel cage	
Weight	13 lbs.
Dimensions	22" x 17" x 12.5"
Part Number	1755



Wire reel holder

New Our Wire reel holder takes the hassle out of installing bulk cable. The Wire reel holder allows you to pull cable conveniently and safely from a durable, yet lightweight frame. It handles multiple spools up to 26" in diameter, and the crossbar is 19" from the floor. Folds flat for easy storage when the job is done.

■ One-year warranty

Technical	
Weight	9 lbs.
Dimensions	31" W x 25" L x 2" D

Ordering	Part Number
Wire reel holder	1756



100' FiberSnake on wire reel cage 1755



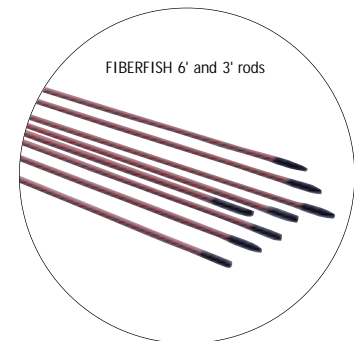
Attachment kit

New The FIBERFISH attachment kit has a hook, magnet head, two bullnose tips, ball chain, and pull ring contained in a plastic box. These tips work with the FIBERFISH 6' and 3' rods, all lengths of the FiberSnake as well as the FlexFish.

■ One-year warranty

Technical	
Weight	6 oz.
Length	4.25" W x 7.25" L x 1.5" D

Ordering	Part Number
FIBERFISH attachment kit	1757

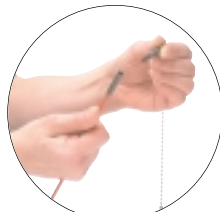


FIBERFISH 6' and 3' rods

FIBERFISH Attachments:



Directional tool 1762



Ball chain 1761



Pull ring (in 1757)



Magnet head 1760



FIBERFISH Attachments

New Choose the following FIBERFISH attachments to make your installation tool set complete. All are valuable installation time-savers for wherever you install cable:

- **The FlexFish** (P/N 1759) is a flexible tool that accepts all attachments for FIBERFISH rods. The handle connects to a 14" flexible metal shaft that allows the installer to bend the tool around any obstacles or into any tight spaces.
- **Heavy-duty magnet head** (P/N 1760) that screws into the FIBERFISH rods, the FiberSnake or the FlexFish. Magnet is rubber coated to prevent scratches. Will pickup dropped tools or find the ball chain in a wall.
- **Ball chain** (P/N 1761) that screws into the FIBERFISH rods, the FiberSnake or the FlexFish. The Magnet head attachment will find this chain in a wall. Small ring on end to attach pull lines. Chain is 8" long.
- **Directional tool attachment** (P/N 1762) is 4" long and is offset 45°. Allows the bullnose tip to flip or twist over obstacles. Screws into the FIBERFISH rods, the FiberSnake or the FlexFish.
- **The hook attachment** (P/N 1763) is 2" long and rubber coated to prevent scratches. Will snag cables or the ball chain in a wall.

- **FishFinder magnetic locator** (P/N 1764) finds the magnetic head inside the wall. Helps to pinpoint the place to cut into the sheetrock wall.
- **Two additional bullnose tips** (P/N 1758) are tapered to maneuver around and through obstacles. Hole to attach pull line. Screws into the FIBERFISH rods, the FiberSnake or the FlexFish. Can pierce insulation and other building materials located in walls.
- One-year warranty

Ordering	Weight	Dimensions	Part Number
FlexFish attachment	3 oz.	18.5"	1759
Magnet head attachment	0.5 oz.	1"	1760
Ball chain attachment	0.5 oz.	8.5"	1761
Directional tool attachment	0.7 oz.	4"	1762
Hook attachment	0.4 oz.	2"	1763
FishFinder magnetic locator	0.6 oz.	2.75" x 2" x 0.5"	1764
Bullnose tips (2)	0.3 oz.	0.5"	1758

Empty cases to build your own kit. Choose an economy or professional kit and fill it with the tools you use on the job every day.

Economy



Economy vinyl, organizer-style zipper case with five elastic tool holders, four crimp tool die set holders, pouch with a hook and loop closure, one long tool holder with elastic at top and a hook and loop strap at bottom. Has attached hand strap.

Technical	
Weight	12 oz.
Dimensions	10" H x 7.5" W x 2" D
Ordering	
Economy zipper case	Part Number
	901059

Professional



Padded nylon zipper case with nine elastic tool holders, five crimp tool die set holders, pouch with a hook and loop closure, one long tool holder with elastic at top and a hook and loop strap at bottom. Has detachable hand strap.

Technical	
Weight	16 oz.
Dimensions	10.5" H x 7.75" W x 3" D
Ordering	
Professional zipper case	Part Number
	901380



Hard-sided ABS plastic case with foam cutouts for a 1300 series crimp tool and seven die sets. Has a snap latch top, full hinge and a fold-down handle.

Technical	
Weight	22 oz.
Dimensions	4.5" H x 8" W x 12.2" D
Ordering	
1300 series crimp case	Part Number
	901013



Padded nylon zipper case with four crimp tool die set holders and one long tool holder with elastic at top and a hook and loop strap at bottom. Outside has external holster with small tool pouch. Has detachable hand strap and wide belt loop.

Technical	
Weight	8 oz.
Dimensions	11" H x 4.5" W x 2" D
Ordering	
Professional zipper crimp pack	Part Number
	901381



Nylon fold-over case with two pouches for speaker probe and tone generator. Fold-over top flap secures closed with a hook and loop closure. Has belt loop closed by a snap.

Technical	
Weight	10 oz.
Dimensions	10" H x 5.5" W x 2.125" D
Ordering	
Professional tone/probe case	Part Number
	901382

Cutters



Strippers



Crimpers



Punchdown Tools



Try our crimp kits with room to add more die sets. Add die sets for the specific jobs you do to make a custom kit!



Coax	Industrial	Mod Plug	Fiber Optic
2034	2029	2061	2030
2039	2031	2062	2043
2042	2033	2063	2652
2045	2035	2064	2654
2046	2040	2065	
2047	2092	2067	
2050	2096	2068	
2051	2097	2670	
2075	2095	2671	
2076		2672	
2082		2673	
2648		2674	
2649			
2653			
2656			
2657			



Coax	Fiber Optic	Industrial
2001	2044	2681
2002	2664	
2003		
2005		
2009		
2019		
2660		
2661		
2662		
2663		



Technical

Weight	25 oz.
Dimensions	4.5" W x 11" L x 2.5" D

Ordering

	Part Number	
1300 Series Crimp Pack	4300	Crimp tool only
1600 Series Crimp Pack	4600	Crimp tool only
CrimpALL Series Pack	4800	Crimp tool only

Cutters



Strippers



Crimpers



Punchdown Tools

