



sandman.com™

Helping you make *IT* work.

VOLUME 46 - APRIL 2023

Visit sandman.com for Our Full Catalog & Knowledgebase

Specialty Handsets



- Push-To-Talk
- Push-To-Mute
- Noise Cancelling
- Amplified
- Inmate
- Kiosk

Custom Cable Assemblies



QWIK Cables

- 25 Pair • 50 Pair
- 100 Pair



Fix the Unfixable!

Tech Devices



**Professional
Installation
Tools
&
Accessories**

Installation Equipment

Sales & Support
630-980-7710

Since 1990

<https://www.sandman.com>



About *sandman.com*TM

sandman.com, Inc. (formerly Mike Sandman Enterprises) started as a distributor of the “*World’s Best*” low voltage **installation tools and equipment**.

As the Telecom industry evolved, we’ve developed hundreds of **tech devices** that solve strange problems and help bridge the gap between analog, digital, and VoIP.

Solving problems and educating technicians has always been at the core of our business. Our **Knowledgebase** has detailed technical explanations and solutions to common telecom issues.

We currently manufacture the world’s largest selection of **specialty handsets**, including Push-To-Talk (PTT), Noise Cancelling, and Amplified handsets.

We also manufacture **custom cable assemblies** to help installers get the job done quickly and leave the site looking clean and professional.

Get in Touch

Online:
www.sandman.com

Phone:
(630) 980-7710

Email:
sales@sandman.com

Monday - Friday
8:30 AM to 5:00 PM CST



@sandmandotcom



We offer a 30-day money back guarantee on all standard products. If our product doesn't solve your problem, just give us a call to request an R.M.A. within 30 days. Does not apply to custom products. Visit **sandman.com/terms** for full ordering terms.

Order by Phone: (630) 980-7710

Made in the USA

USA Manufacturing

Since 1990, we've been manufacturing specialty handsets, custom cable assemblies, and unique problem-solving telecommunications devices in the suburbs of Chicago.

Now, more than ever, it's important to keep a handle on your supply chain. Customers are tired of long lead times, price gouging and excuses.

We've helped our customers get their jobs done on time (and on budget) for over 30 years.



sandman.com™

Helping you make IT work.

- **1,000s of Products & Components In Stock**
 - **Fair and Competitive Pricing**
 - **High Quality, Low Lead Times**
 - **Rapid Prototyping & Production**
 - **Fast and Affordable Shipping**
- **30+ Years Supporting the Industry**

We work closely with domestic injection molding companies and machine shops to source materials for our unique products, and assemble them in-house.

Working with a U.S. Based manufacturer means not worrying about port congestion, tariffs and lengthy delays in communication.

What can we help you build?



Order Online at www.sandman.com

sandman.com

Low Voltage Installation

STOP Crooked Cut Outs!

Low Voltage Mounting Bracket Template

- Professional Grade Installation Tool
- Supports Single & Double Gang
- Vertical & Horizontal Levels
- Centering Tick Marks
- 4" Convenience Ruler

See it in action!
(Scan for Video)



100% 
MADE IN USA

White Labeling Available



SKU: #CHM30

Quantity Discounts Available - Outfit Your Whole Crew!

Low Voltage Mounting Brackets (Mud Rings)

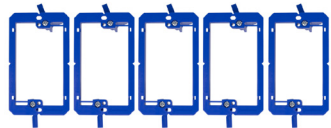
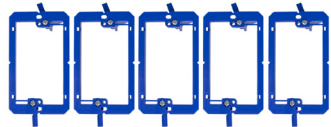


SKU: #CHM3K

Adjustable
1/4" to 1"
Depth

Available in
Black or Blue

Perfect Match
to our
Template



Blue 10 Pack
SKU: #CHM1P



Universal
Butt-Set Banjo Adapter
#TOO6G



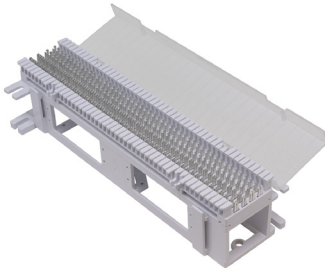
*While Supplies last
15' Fiberglass Fish
#CID8D



Cable Pulling
Elbow
#TOH40

Order by Phone: (630) 980-7710

66 Blocks & Accessories



Our 66 Block Kits Include 89 D Bracket & Clear Plastic Cover

66M Block Kits (Block, 89 D Bracket & Cover)	
Style	SKU
Standard (No Amp)	#CBL6A
1 Female Amp	#CBL6B
1 Male Amp	#CBL6C
2 Female Amps	#CBL6E
2 Male Amps	#CBL6D


Protect Your Blocks from Service Calls!

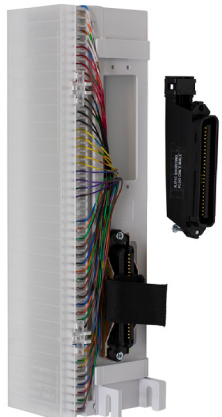
Hinged Covers	
Color	SKU
Clear	#CBL8K
Blue	#CBL8L
Orange	#CBL8M
White	#CBL8N



Colored Plastic Bridging Clips	
Color	SKU
Blue	#CBL7L
Green	#CBL7M
Red	#CBL7N
Violet	#CBL7O
White	#CBL7P
Yellow	#CBL7Q

You need 1 per pair!

	Stainless Steel Bridging Clips (100 per bag) #CBL7K
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RJ-71C Block
12 Pair Network Interface Block with Shorting Plug

SKU: #CBL6G

Order Online at www.sandman.com

25 Pair Telco Cables



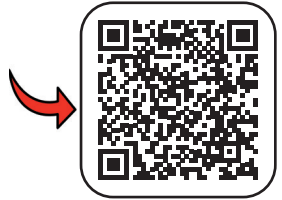
Ready to Ship 25 Pair Telco Assemblies
(in case you need them **tomorrow!**)

- 5', 10', 15', 20' and 25' Lengths
- 90 Degree Male / Female Amps
- 10', 15', 25' QWIK Cables



**100%
Tested**

See our in-stock
ready to ship
configurations



These make installs go FAST!

Stocked **QWIK** Cables for:

- Avaya • Samsung • NEC
- Shoretel • Toshiba • Vertical
- Panasonic and More...

QWIK Cables



We make Custom Cable Assemblies FAST!

Keep your costs down and your racks looking sharp
with cables made to the length you need!

We usually ship custom cables in 1 to 2 business days.

Custom Telco Cables:

- 25 Pair • 50 Pair • 100 Pair
- CAT3 PVC • CAT5E • Plenum
- 90° • 110° • 180° • Bail Lock
- Opposite Entry • Custom Pin-Outs
- Custom Lengths • **You Name It!**

Request a Quote

By Phone:
(630) 980-7710

By Email:
sales@sandman.com

**We Use
Top Quality Cable
& Components**

Brand Showcase



Order by Phone: (630) 980-7710

Handset & Line Cords



**Quality Handset Cords
Won't tangle as easily
as cheaper cords!**

Replacement Handset Cords

7', 12' & 25' **Stretched** Lengths
Shiny (Gloss) Black, Flat Black,
Charcoal Gray, White, Off-White
Ash, Ivory, Light Gray, Cherry Red
and more...

**Yes... we make custom
handset & line cords too!**

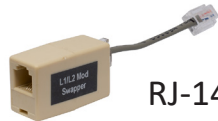
Line Cords

7', 12' & 25' **Standard** Lengths
Black or Silver Satin



Mod Swapper

Swaps Pairs 1 & 2



RJ-14

SKU: #MSC2K



Handset Y-Adapter
#KIT11



Handset Cord
Detangler
#HST3N



6' Red 4 Conductor Spade
to Spade Handset Cord
#TEL5B



25 Pair Female-Female
Goof Plug
#CBL5D



25 Pair Amp
Velcro Tie Bracket
#CBL5S



25 Pair U-Clip
#CBL5M



25 Pair Male-Male
Goof Plug
#CBL5C



DIY Amp Connector Kits



15' 2 Pair Solid Wire
#CBL3F

Order Online at www.sandman.com

Specialty Handsets

We manufacture the largest selection of Specialty Handsets in the world!

Our handset production database has build information for over 1,500 makes and models of business phones. Whether you just need a replacement handset or more advanced features such as **amplified**, **push-to-talk** or **noise cancelling**, give us a call and we'll let you know if we can build it.

We make Handsets Compatible with:

- AT&T / Lucent / Avaya / G3 / Definity / Partner / Merlin
 - Northern Telecom / NT / Nortel / Norstar / Meridian
 - Cisco • Polycom • NEC / Nitsuko / TIE • Vodavi / Vertical
 - Toshiba • Panasonic • ESI / Estech • Samsung
 - Comdial / Stromberg Carlson • ITT / Cortelco
 - Atlas / Key System US • Inter-tel / Mitel
- ...and LOTS more!*



Avaya 9600 Series Push-To-Talk with Non-Momentary Rocker

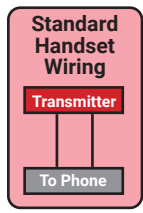
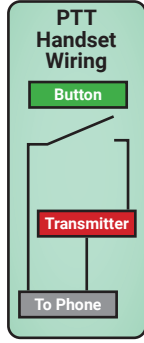


Cisco 7800/8800 Series Push-To-Talk with Momentary Button

Push-To-Talk Handsets

- For Secure Environments
- Physically Disconnects Transmit Circuit
- Mitigate Eavesdropping Risks
- Required by Many Government Agencies
- Multiple Switch Options

Also Available in Push-To-Mute!



Switch Types:

Momentary switches revert to their default state when the user releases them (most secure).

Non-Momentary switches remain on or off as toggled by the user.

Order by Phone: (630) 980-7710

Specialty Handsets



AT&T
Noise Cancelling
Handset

Noise Cancelling Handsets

Noise Cancelling Handsets are designed to help eliminate background noise and prevent it from being transmitted through the handset.

They work wonders on noisy factory floors, in busy restaurants and loud call centers.

By adding a second sound port and special **noise-cancelling microphone** the handset can differentiate between the speaker and background noise, **improving communication.**



*They're also great at Eliminating
Paging Feedback!*

Amplified Handsets

Amplified Handsets boost the receiver volume level and are great for individuals who are hard of hearing. If the environment is loud, a noise-cancelling handset is generally a better choice since an amplified handset may amplify the noise in the handset's sidetone.

Kiosk, PC & Visitation Handsets

We custom build special application handsets for Kiosks, PCs and Prison Visitation. Armored cables add security and durability for public use applications.

Common applications include:

- Public Kiosks & Museum Exhibits
- Pay Phones
- Intercoms
- Trading Turrets
- 911 Dispatch Consoles
- Prison Visitation Handsets

*Call
or Email
us for a
Quote!*



Armored Cable
Visitation / Inmate
Handset

Order Online at www.sandman.com

Analog Telephones & Dialers



2500 Style Desk Phones with Amplified Handset

Style	SKU
Black with Keypad	#TEL1G
Red with Keypad	#TEL1H
Ivory with Keypad	#TEL1I
Black No-Dial	#TEL1J
Red No-Dial	#TEL1K
Ivory No-Dial	#TEL1L

2554 Style Wall Phones with Amplified Handset

Style	SKU
Black with Keypad	#TEL1A
Red with Keypad	#TEL1B
Ivory with Keypad	#TEL1C
Black No-Dial	#TEL1D
Red No-Dial	#TEL1E
Ivory No-Dial	#TEL1F



Works as
wall or desk
phone!



Trimline Phones

Color	SKU
Black	#TEL1M
Red	#TEL1N
White	#TEL1O



NOISY Environment?

Ask us about our
Noise-Cancelling
Handsets!

Don't Forget a Dialer

Mini Hot-Dialer



SKU: #MSC2L

We can
install it
inside our
2500 / 2554
phones!

Small Enough to Fit Almost Anywhere...

Order by Phone: (630) 980-7710

Telephony Accessories



In-Line Handset Amplifier

- Boost Handset Volume
- Compatible with Most Modern Phones

- Connects in-line between the phone and handset
- Volume Adjustment Wheel
- Mute Button
- AC or Battery or USB Powered
- Includes USB Cord & Power Cube

SKU: #XMT9A

Recording & Playback



- Connects between phone and handset
- 3.5mm Audio Out
- Records **BOTH** sides of the conversation

SKU: #KIT90

- Connect between the phone and handset



- 3.5mm Audio Interface

Inject Pre-Recorded Audio into your Conversation

SKU: #MSC3M

Orator Desktop Speaker



- Training Aid
- Broadcast Conference Calls

Monitor Calls in Real-Time

SKU: #SER7E

Ringer Cut-Off Switch



- DO NOT DISTURB!**
- Blocks Ringing but leaves line active for outbound calls.

SKU: #MIS9M

TKM-6 & A/B Switches

Options

Black or Ivory

Top or Front Mount Switch

Terminal Strip or Modular

Optional LED

Custom Versions Available!

Scan to View Stocked Configurations



Order Online at www.sandman.com

Telecom Troubleshooting Devices

Loop Current Tester



- One Button Diagnostic Tool
- 5 LED Range Indicators
- Line Powered Device

SKU: #TOH70

Technician's Smart Multimeter

- Smart True RMS Meter
- Measure AC/DC Voltage
- Battery Powered



Perfect for Phone Lines!

SKU: #TOH3B



Single Line Modular Loop Current Booster+
#KIT8L

Loop Current That's Too High or Too Low Can Cause **Strange** Problems!

- ◀ Low Loop Current? *Use a Booster*
- High Loop Current? *Use a Regulator* ▶



Single Line Modular Loop Current Regulator
#WAL5S

Universal CPC Generator

Forces your phone system to hang up when the calling party disconnects!



SKU: #DSI6A



Single Line 66 Block Loop Current Regulator
#MIS1S

Ring Voltage Booster II



Make all phones in your house ring again!

25-Line Rack Mount Version Available!

- Generates 90VAC Ring at 20 Cycles
- Boosts Ring Current by 7.5 REN

Modular Line In & Line Out

SKU: #KIT8R

ELIMINATE Radio Frequency Interference

Frequencies:

- AM Radio
- FM Radio
- CB Radios
- RF Sealing

Interface:

- Line Cord (RJ-14)
- Handset (RJ-9)
- Ethernet (RJ-45)
- Hard Wire



Modular or Hard Wire



Order by Phone: (630) 980-7710

Surge Protection / Relays / ATA

Maximum Lightning Protection

- Dual Stage Protection for **Over Current** and **Over Voltage**
- Self Resetting Fuse
- Available for Analog Lines, T1, T3 and 100 Base-T
- 66 Block & Modular versions available

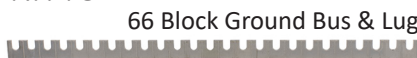
Even the best surge protectors are useless without a good ground!



MLP-270
66 Block Protector
#KIT10



10' AC Ground Plug
w/ 10 Gauge Wire
#KIT1M



66 Block Ground Bus & Lug
#KIT1N



Relay Closure on Ring Voltage

Modular Ring Relay
#CID2L



Relay Closure on Line In-Use

Modular Line In-Use Relay
#CID2N



VOX Activated In-Use Relay

Headset In-Use Relay
#PAP7E

Echo Stopper™

- Eliminates VoIP Echo
- Adjustable Impedance Matcher
- Solves DTMF Issues



SKU: #WAL5F

ATA Features:

- (2) FXS Ports
- WAN Port
- (2) LAN Ports
- Power Supply



Ultimate Technician's ATA

2 FXS Port Analog Telephone Adapter



The Most Compatible ATA We've Found! #CAP7E

- Works great for fax machines
- Programmable as Ringdown / Line Simulator from FXS1 to FXS2
- Configurable Loop Current, Ring Voltage, CPC & More!
- SIP Account Required for VoIP Use

Order Online at www.sandman.com

Knowledgebase Highlights

Sometimes figuring out where to start is the hardest part. Our Knowledgebase contains in-depth technical articles on common problems telecom technicians encounter in the field.

Highlights of some of our most popular articles are below, scan the QR code at the bottom to view our Knowledgebase online.

- **Telephone Line Diagnostics**
Learn to take line voltage readings and diagnose line problems
- **Loop Current & Circuit Loss**
Fix “unfixable” problems caused by abnormal loop current
- **Echo and DTMF Bulletin**
Fix VoIP echo and DTMF tone recognition problems
- **Fire Alarm “Trouble” Bulletin**
Solve alarm “Trouble” codes caused by irregular line voltage
- **Surge Protection**
Learn to protect your equipment from lightning storms
- **Electrical Grounding Bulletin**
A bad ground can cause strange problems and equipment loss
- **Longitudinal Imbalance**
When all else fails, a longitudinal imbalance may be at fault
- **Ring Voltage Tech Bulletin**
Learn to solve “won’t ring” issues and boost ring voltage
- **Radio Frequency Interference**
Eliminate RFI from radio stations and other sources
- **Data Noise Elimination**
Eliminate data noise from lines that can cause malfunctions
- **Call Party Control (CPC)**
Solve problems with lines getting stuck open after calls end
- **Telecom Fraud Prevention**
Prevent telecom fraud and protect your communication infrastructure
- **Specialty Handset Types**
Learn more about noise-cancelling and other specialty handsets
- **Telephone History Page**
Take a trip back in time through the world of telephony



Our **Knowledgebase** is full of in-depth technical articles and is always **free** to view! Scan the QR code to the right or visit: <https://www.sandman.com/knowledgebase>

View
Online



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Telephone Line Diagnostic Table

Telephone / Line Number >				
Loop Current & Talk Battery				
1	Loop Current DCma Ideal Range (23 to 35DCma)			
2	On-Hook DCV Ideal Range (24 to 50VDC)			
3	Off-Hook DCV Ideal Range (5 to 15VDC)			
AC Ring Voltage & Current				
4	AC Ring Voltage ($>75VACRMS$)			
5	AC Ring Current Ideal Range (8.5 to 45maAC)			
Induced AC / Longitudinal Imbalance				
6	On-Hook ACV-Tip to Ring ($<.5VAC$)			
7	On-Hook ACV-Tip to Ground ($<.5VAC$)			
8	On-Hook ACV-Ring to Ground ($<.5VAC$)			

The only way to diagnose many problems and compatibility issues on phone lines is to take voltage and current measurements.

When you have a problem, take these measurements on all of the phone lines at the premise. Compare the results to those at other premises with no problems, and the cause of the problem should jump out at you.

Always take measurements at premises where you **aren't** having problems first, so you have a basis of comparison, and a comfort level with your measurements. **Never use a tester for the first time at a premise with a problem!**

Once you have the measurements that point to the cause of the symptoms, going to battle with the phone company is a lot easier. Even with these measurements, you may have to escalate the trouble ticket, since the repair people at the company may not know what these measurements mean. If you don't want to battle the phone company, we sell devices that can solve many of these issues.

Scan the QR Code to see our articles, videos and related products, or to print more copies of this chart.



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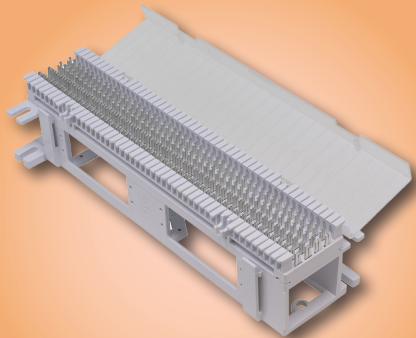
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Phones & Dialers



66 Blocks & Accessories



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