

WEST PENN WIRE

ACCESS CONTROL CABLES

CARD READERS CABLES

BIOMETRIC READER CABLES

KEYPAD CABLES

RS-485 Cables

"EXCEEDING EXPECTATION WITH PERFORMANCE"

ACCESS CONTROL SYSTEMS:

An access control system is an integration of hardware, software, and management tools that electronically monitor and control access through door, gates, elevators, and many other entry points.

Access control systems are found virtually everywhere. They can be found in Hotels, Hospitals, Airports, Banks, Prisons, Military facilities, Social Clubs, Residential Complexes, Libraries, Factories, and many other places where access security is a premium.

The Access Control Systems of today are becoming more sophisticated. Many other security applications are being integrated with the Access control system to make it a complete security system. Some security systems being integrated are: • CCTV • Intrusion detection • HVAC • Time & attendance reporting.

READER TECHNOLOGY:

There are many choices in reader (reader) technology, the most common technologies for card access controls are:

- Bar Code
- Magnetic stripe - One of the most popular
- Wiegand
- Proximity - One of the most popular

BAR CODE:

Bar code is very common in non-security applications but it seldom is the technology of choice for security and access control.

MAGNETIC STRIPE:

Magnetic stripe is the most widely used technology worldwide for access control applications. Most people are familiar with the technology because of its wide spread use by bank and credit card operations. This technology only provides medium security level because it is possible to duplicate cards. But because of the low cost of the cards and readers this technology is an attractive choice for many applications.

WIEGAND:

Wiegand was originally created to provide a permanently encoded card when magnetic stripe cards were so sensitive to magnetic fields. This technology was the most common choice for high security applications before the advent of lower cost proximity technology, and high density magnetic stripe.

PROXIMITY:

Proximity is the fastest growing technology for card access control applications. The proximity technology reader constantly transmits a low-level fixed RF signal that provides energy to the card. When the card is held at a certain distance from the reader, the RF signal is absorbed by the card which contains a unique identification code. The main advantage is there is no wear, no slots, no moving parts, and no read heads to maintain. Proximity technology is based on a frequency of 125KHZ, which has a longer read-range than smart card technology.

ACCESS CONTROL SYSTEMS:

OTHER TECHNOLOGIES:

SMART CARD:

Smart cards are one of the latest additions to the world of access control. The smart cards can be contact or contactless cards and come in two varieties: memory and microprocessor. Contactless Smart cards, also known as Mifare, work on the premise of Radio Frequency Identification (RFID). A frequency of 13.56MHZ has been designated for use in technology.

BUTTON :

This technology takes a computer chip and places it inside a small metal enclosure. Each button has a unique and unalterable address. The electronic communication interface can be worn on a watch, key chain, a pin, or ring.

BIOMETRICS:

Biometrics technology verifies or identifies a person based on physical characteristics. A biometric system uses hardware readers to capture the biometric information, and software to maintain and manage it.

Types of biometric readers:

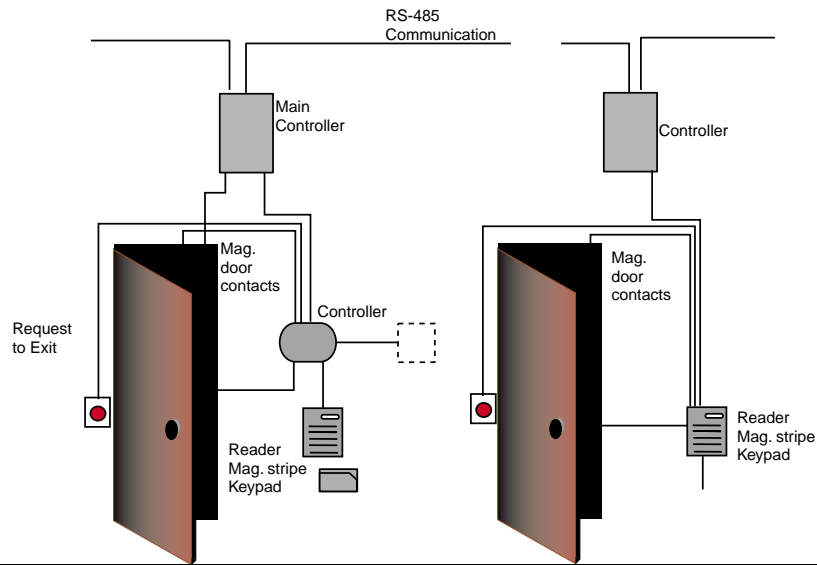
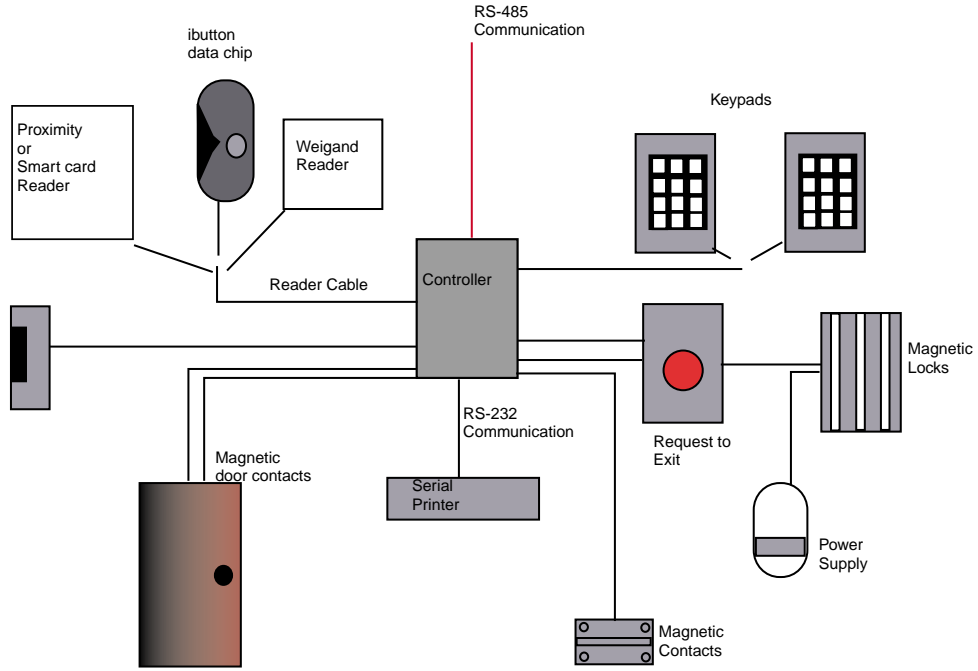
- Finger scan- Most popular
- Iris & Retina- Highly accurate
- Hand Geometry
- Face scan
- Voice & Signature

KEYPADS:

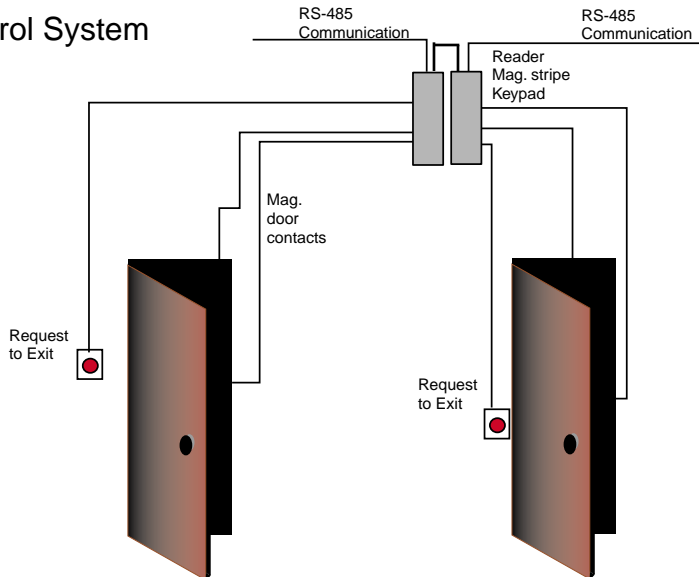
Keypads are simply a pad with numbered combinations for access.

In areas with high security, a entry point will be equipped with multiple reader technologies.

TYPICAL SYSTEM LAYOUTS:

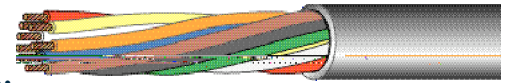


Typical RS-485 Bus Control System



Access Control Cables

Communication & Control Cable Multiple Conductor 22 AWG / Unshielded featuring the PERFECT STRIPE®



Applications:

Indoor for:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power-limited Control Circuits

Standard spool size 1000ft.

Description:

- ASTM Bare Copper • PVC insulation • Cabled construction • Overall PVC jacket

Rating:

- NEC Type CMR
- (UL)-C(UL) Listed or c(ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1666

Catalog No.	No. of Cond.	Conductor Type & Nom. D.C.R	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. O.D.	NEC Type	Nom. Capacitance	Jacket Color
			Inches		Inches	Inches			
855	5	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.168	CMR	--	Gray
270	6	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.183	CMR	--	Gray
271	8	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.198	CMR	--	Gray
272	10	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.243	CMR	--	Gray
273	12	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.251	CMR	--	Gray
274	15	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .020	.278	CMR	--	Gray
275	20	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.308	CMR	--	Gray
276	25	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .015	.343	CMR	--	Gray
277	30	22 AWG (7x30) 17 Ω/Mft	PVC .010	None	PVC .020	.364	CMR	--	Gray

Special Notes:

- Select cables are available in our Easybox®
- Orange ripcord under jacket

Color Code- See page 6

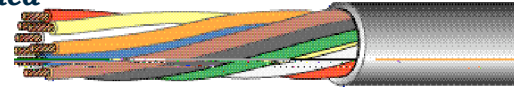
Access Control Control Cables

WEST PENN WIRE

Communication & Control Cable

Multiple Conductor 18 & 16 AWG / Unshielded

featuring the **PERFECT STRIPE**®



Applications:

Indoor for:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power-limited Control Circuits

Description:

- ASTM Bare Copper • PVC insulation • Cabled construction • Overall PVC jacket

Rating:

- NEC Type CMR
- (UL)-C(UL) Listed or c(ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1666

Standard pool size 1000ft.

Catalog No.	No. of Cond.	Conductor Type & Nom. D.C.R	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. O.D.	NEC Type	Nom. Capacitance	Jacket Color
			Inches		Inches				
280	5	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	None	PVC .015	.210	CMR	--	Gray
281	7	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	None	PVC .015	.240	CMR	--	Gray
282	9	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	None	PVC .015	.280	CMR	--	Gray
283	12	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	None	PVC .020	.316	CMR	--	Gray

Access Control Cables

WEST PENN WIRE



Communication & Control Cable 22 AWG Multiple Conductor / Overall Shielded featuring the *PERFECT STRIPE*®

Applications:

Indoor for:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power-limited Control Circuits

Description:

- ASTM Bare Copper • PVC insulation • Overall shield 100% coverage of aluminum polyester foil with 24 AWG Strd. TC drain wire • Cabled construction • Overall PVC jacket

Rating:

- NEC Type CMR
- (UL)-C(UL) Listed or (ETL)us - c(ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1666

Standard spool size 1000ft.

Catalog No.	No. of Cond.	Conductor Type & Nom. D.C.R	Insulation	Shielding	Jacket Type	Nom. O.D.	NEC Type	Nom. Capacitance	Jacket Color
			Type & Thickness Inches	& % Coverage	& Thickness Inches				
3241	4	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.157	CMR	55 pf/ft* 99 pf/ft**	Gray
3855	5	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.172	CMR	55 pf/ft* 99 pf/ft**	Gray
3270	6	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.187	CMR	55 pf/ft* 99 pf/ft**	Gray
3271	8	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.212	CMR	55 pf/ft* 99 pf/ft**	Gray
3272	10	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.247	CMR	55 pf/ft* 99 pf/ft**	Gray
3273	12	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.255	CMR	55 pf/ft* 99 pf/ft**	Gray
3274	15	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .020	.282	CMR	55 pf/ft* 99 pf/ft**	Gray
3275	20	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil 100%	PVC .020	.312	CMR	55 pf/ft* 99 pf/ft**	Gray

* Capacitance between conductors.

** Capacitance between one conductor and the other connected to the shield

Special Notes:

- Selected Plenum Versions see pages 33
- Select cables are available in our Easybox®
- Orange ripcord included on cables containing 5 or more conductors

Access Control Cables

WEST PENN WIRE

Communication & Control Cable

18 & 16 AWG Multiple Conductor / Overall Shielded

featuring the **PERFECT STRIPE®**



Applications:

Indoor for:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power-limited Control Circuits

Description:

- ASTM Bare Copper • PVC insulation • Overall shield 100% coverage of aluminum polyester foil with 22 AWG Strd. TC drain wire • Cabled construction • Overall PVC jacket

Rating:

- NEC Type CMR
- (UL)-C(UL) Listed or c(ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1666

Standard spool size 1000ft.

Catalog No.	No. of Cond.	Conductor Type & Nom. D.C.R	Insulation Type & Thickness	Shielding & % Coverage	Jacket Type & Thickness	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
			Inches	% Coverage	Inches				
3244	4	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.195	CMR	68 pf/ft* 122 pf/ft**	Gray
3280	5	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.214	CMR	68 pf/ft* 122 pf/ft**	Gray
3021	6	18 AWG (7x26) 6.6 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.243	CMR	68 pf/ft* 122 pf/ft**	Gray
3281	7	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.245	CMR	68 pf/ft* 122 pf/ft**	Gray
3282	9	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.284	CMR	68 pf/ft* 122 pf/ft**	Gray
3283	12	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil 100%	PVC .020	.319	CMR	68 pf/ft* 122 pf/ft**	Gray
3245	4	16 AWG (19x29) 4.2 Ω/Mft	PVC .010	Al. Foil 100%	PVC .015	.235	CMR	80 pf/ft* 144 pf/ft**	Gray

* Capacitance between conductors.

** Capacitance between one conductor and the other connected to the shield

Special Notes:

- Select cables are available in our Easybox®
- Orange ripcord included on cables containing 5 or more conductors
- Selected Indoor/Outdoor Aquaseal Water Resistant® Versions see pages 39

Aquaseal Cables Reader Cables

Aquaseal® Water Blocking Cable Two & Multiple Conductor / Shielded

Applications:

Indoor/Outdoor Use:

- Intercom Systems
- Security Systems
- Sound and Audio
- Background Music
- Power-limited Control Circuits



Description:

- ASTM Bare Copper • PVC insulation • Short overall twist lengths
- Overall shield 100% coverage of aluminum polyester foil with drain wire • Waterblocked construction • Overall Sunlight/Moisture Resistant PVC jacket

Rating:

- NEC Type CM or CL3
- (UL) or (ETL)us Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1685

Standard spool size 1000ft.

Catalog No.	No. of Cond.	Conductor Type & Nom. D.C.R	Insulation Type & Thickness	Shielding % Coverage	Jacket Type & Thickness	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
			Inches	Drain Wire	Inches				
AQC3274	15 Cond.	22 AWG (7x30) 17 Ω/Mft	PVC .010	Al. Foil-100% 24 Strd.	PVC .025	.361	CM CL3	55 pf/ft* 99 pf/ft**	Gray
AQC3186	6 Cond.	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil-100% 22 Strd.	PVC .025	.323	CM CL3	68 pf/ft* 122 pf/ft**	Gray
AQC3283	12 Cond.	18 AWG (7x26) 6.2 Ω/Mft	PVC .010	Al. Foil-100% 22 Strd.	PVC .025	.410	CM CL3	68 pf/ft* 122 pf/ft**	Gray

* Capacitance between conductors.

** Capacitance between one conductor and the other connected to the shield

Color Code	
Catalog No.	AQC3186, AQC3274, AQC3283
Primary Color Code	1. Black, 2. Red, 3. White, 4. Green, 5. Brown, 6. Blue, 7. Orange, 8. Yellow, 9. Purple, 10. Gray, 11. Pink, 12. Tan, 13. White/Black, 14. White/Red, 15. White/Green
	JACKET: Gray
	Conductors 13 and above have PERFECT STRIPE®

Special Notes:

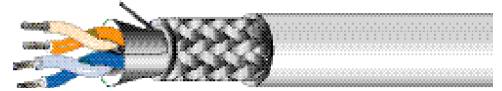
- Aquaseal Water Resistant Cables is a Registered Trademark of West Penn Wire
- Orange ripcord under jacket

RS-485 Data Grade Cable

Data Grade Cable

Multiple Pair Series / Overall Shielded

RS-485 Data Cables



Applications:

Indoor for:

- Computer Application
- Low Capacitance Data
- RS-485 Data Applications

Description:

- ASTM Tinned Copper • Polyolefin Insulation • Twisted pair construction • Polyester wrap • Overall shield 100% coverage of aluminum polyester foil with 24 Awg. Stranded drain wire
- 90% Tinned Copper Braid • Overall PVC Jacket

Rating:

- NEC Type CM
- (UL) Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1685

Standard spool size 1000ft.

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R.	Insulation Type & Thickness Inches	Shielding & Coverage	Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D4851	1	24 AWG (7x32) 26 Ω/Mft	Polyolefin	Al. Foil-100% with drain wire TC Braid 90%	PVC .032	.275	CM	12.8 pf/ft* 23 pf/ft**	Gray
D4852	2	24 AWG (7x32) 26 Ω/Mft	Polyolefin	Al. Foil-100% with drain wire TC Braid 90%	PVC .032	.305	CM	12.8 pf/ft* 23 pf/ft**	Gray
D4853	3	24 AWG (7x32) 26 Ω/Mft	Polyolefin	Al. Foil-100% with drain wire TC Braid 90%	PVC .032	.320	CM	12.8 pf/ft* 23 pf/ft**	Gray
D4854	4	24 AWG (7x32) 26 Ω/Mft	Polyolefin	Al. Foil-100% with drain wire TC Braid 90%	PVC .032	.345	CM	12.8 pf/ft* 23 pf/ft**	Gray

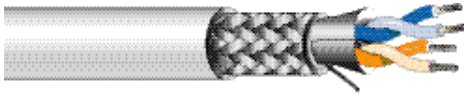
Color Code	
Pair No.	Colors
1	Blue- White/Blue
2	Orange- White/Orange
3	Green- White/Green
4	Brown- White/Brown
JACKET: Gray	

Electrical Characteristics
Nom. Vel of Propagation - 66%
Nom. Impedance Ω 24 Awg.- 120Ω

- * Capacitance between conductors.
- ** Capacitance between one conductor and the other connected to the shield

RS-485 Data Grade Cable

WEST PENN WIRE



Data Grade Plenum Cable Multiple Pair Series / Overall Shielded RS-485 Data Cables

Description:

- ASTM Tinned Copper • Teflon Insulation • Twisted Pair Construction
- Polyester wrap • Overall shield 100% coverage of aluminum polyester foil with 24 Awg. Stranded drain wire • 90% Tinned Copper Braid
- Overall Teflon Jacket

Rating:

- NEC Type CMP
- (UL) Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: NFPA-262 Smoke & Flame Test

Applications:

- Indoor within ducts, plenums and other spaces used for environmental air:
- Computer Application
 - Low Capacitance Data
 - RS-485 Data Applications

Standard spool size 1000ft.

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness	Shielding & Coverage	Jacket Type & Thickness	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
			Inches		Inches				
D254851 New	1	24 AWG (7x32) 26 Ω/Mft	Teflon®	Al. Foil-100% with drain wire TC Braid 90%	Teflon®	.202	CMP	12.8 pf/ft* 23 pf/ft**	Gray
D254852 New	2	24 AWG (7x32) 26 Ω/Mft	Teflon®	Al. Foil-100% with drain wire TC Braid 90%	Teflon®	.305	CMP	12.8 pf/ft* 23 pf/ft**	Gray

Electrical Characteristics

Nom. Vel of Propagation - 69%
Nom. Impedance Ω 24 Awg.- 100Ω

Color Code	
Pair No.	Colors
1	Blue- White/Blue
2	Orange- White/Orange
JACKET: Gray	

* Capacitance between conductors.

** Capacitance between one conductor and the other connected to the shield

Special Notes:

- Teflon®- Dupont Tradename for FEP-Fluorinated Ethylene Propylene

Data Grade Cable

WEST PENN WIRE



Data Grade Cable Multiple Pair / Overall Shielded

Description:

- ASTM Tinned Copper • Polyolefin insulation
- Overall shield 100% coverage of aluminum polyester foil with 24 AWG strd. TC drain wire • Twisted Pair Construction • Overall PVC jacket

Rating:

- NEC Type CM
- (UL) Listed
- Meets 300V requirements as specified in the NEC
- Flame Rating: UL1685

Standard pool size 1000ft.

Applications:

Indoor for:

- Control
- Signaling
- Electronic Data
- Microprocessor Based
- Serial Data

Catalog No.	No. of Pairs	Conductor Type & Nom. D.C.R	Insulation Type & Thickness Inches	Shielding & Coverage	Jacket Type & Thickness Inches	Nom. O.D. Inches	NEC Type	Nom. Capacitance	Jacket Color
D2401	1 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.160	CM	14.5pf/ft* 26pf/ft **	Gray
D2402	2 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.228	CM	14.5pf/ft* 26pf/ft **	Gray
D2403	3 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.248	CM	14.5pf/ft* 26pf/ft **	Gray
D2404	4 Pair	24 AWG (7x32) 26 Ω/Mft	Polyolefin .013	Al. Foil 100%	PVC .030	.268	CM	14.5pf/ft* 26pf/ft **	Gray
D3651	2 Pair	22 AWG (7x30) 17 Ω/Mft	Polyolefin .010	Al. Foil 100%	PVC .030	.235	CM	26pf/ft* 47pf/ft **	Gray
D3652	3 Pair	22 AWG (7x30) 17 Ω/Mft	Polyolefin .010	Al. Foil 100%	PVC .030	.248	CM	26pf/ft* 47pf/ft **	Gray
D3653	4 Pair	22 AWG (7x30) 17 Ω/Mft	Polyolefin .010	Al. Foil 100%	PVC .030	.268	CM	26pf/ft* 47pf/ft **	Gray

Special Notes:

- Select Cables are available in Easybox ®
- Orange ripcord included on cables containing 3 or more pairs.

Electrical Characteristics

Nom. Vel of Propagation - 66%
Nom. Impedance Ω 24 Awg.- 100Ω
Nom. Impedance Ω 22 Awg.- 55Ω

* Capacitance between conductors.

** Capacitance between one conductor and the other connected to the shield

Color Code

Pair No.	Colors
1	Black/Red
2	Black/White
3	Black/Green
4	Black/Blue
JACKET: Gray	

Lickity Split Bondled Cables

2007

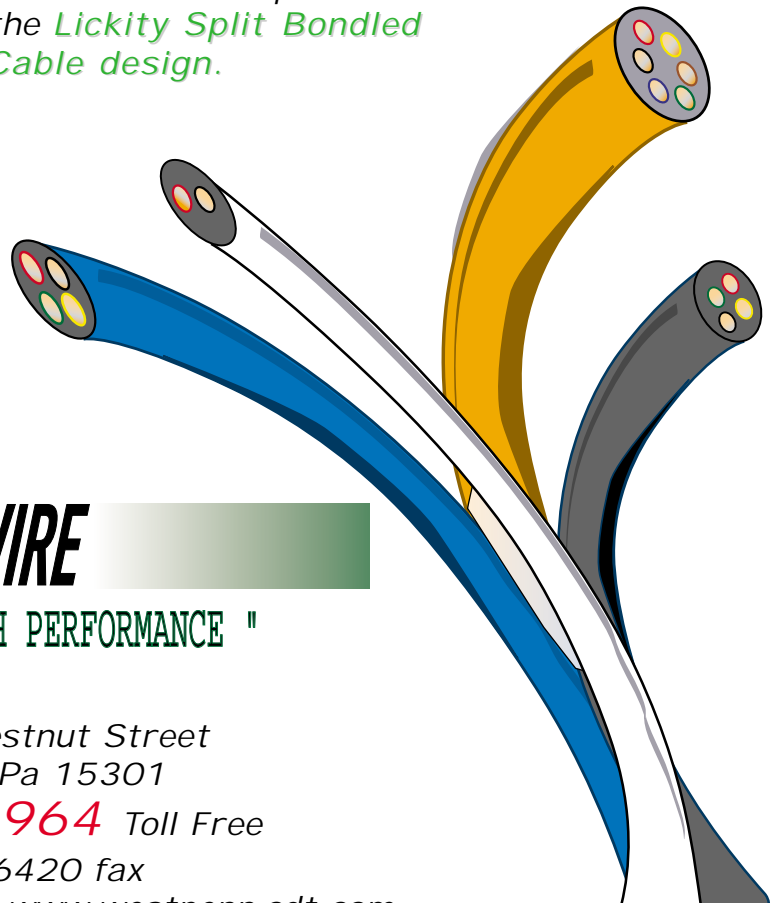
Lickity Split Bondled Cables, a new concept for quick, easy, and efficient installation of composite cables. The patent pending construction offers an intermittently internal bonded and bundled design that we like to call Bondled. The bonding is done internally every 4 to 7 inches, depending on the cable grouping.

Jacketed composite cables are larger and more difficult to terminate. The *Lickity Split Bondled Cables* offer the advantage of easier, faster termination time, as well as a smaller cable profile.

Bound Cables are composite cables combined within a helical wrap that offer the advantage of a small profile, and a lower cost, but with the wrap the cable may get snagged or caught by burrs during installation. The *Lickity Split Bondled Cables* offer the same advantages as the bound cables, but because of its cabled construction and Bondled design, the cable can be installed and terminated in a "lickity split".



Other continuous internally bonded cables do not offer the quick termination time of the *Lickity Split Bondled Cable* design.



WEST PENN WIRE

" EXCEEDING EXPECTATIONS WITH PERFORMANCE "

2833 West Chestnut Street
Washington, Pa 15301

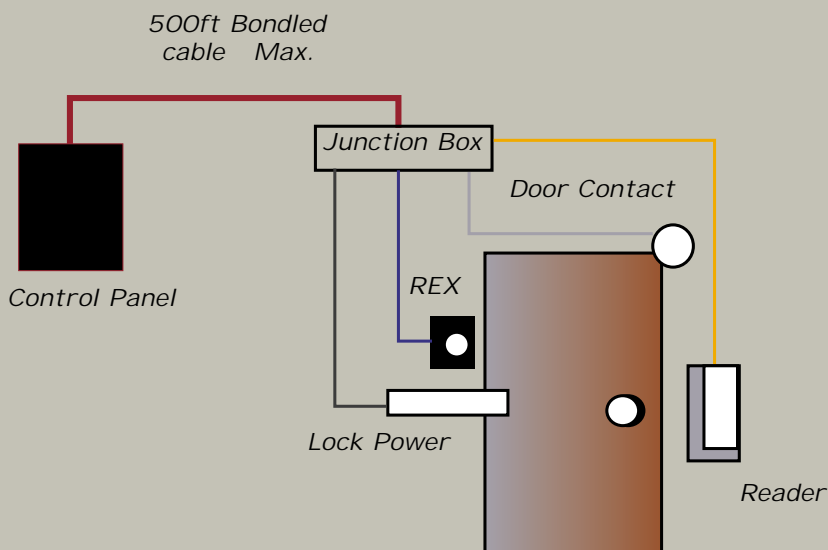
• **800-245-4964** Toll Free

• 724-222-6420 fax

• info@westpenn-cdt.com • www.westpenn-cdt.com

Access Control Bondled cables

Product No.	Construction	Description	Individual Cable O.D	Overall O.D
LS1822 CMR	4 cables Bondled together	<p>Cable 1 Door Contact 2 Conductor 22 AWG (7x30) Bare Copper</p> <p>Cable 2 Request to Exit 4 Conductor 22 AWG (7x30) Bare Copper</p> <p>Cable 3 Reader Cable 6 Conductor 22 AWG (7x30) Shielded Bare Copper</p> <p>Cable 4 Lock Power 4 Conductor 18 AWG (7x26) Bare Copper</p>	<p>Cable 1 .127" (3.32mm)</p> <p>Cable 2 .153" (3.89mm)</p> <p>Cable 3 .187" (4.75mm)</p> <p>Cable 4 .191" (4.85mm)</p>	.440 inch (11.18mm)
Product No.	Construction	Description	Individual Cable O.D	Overall O.D
LS251822 CMP	4 cables Bondled together	<p>Cable 1 Door Contact 2 Conductor 22 AWG (7x30) Bare Copper</p> <p>Cable 2 Request to Exit 4 Conductor 22 AWG (7x30) Bare Copper</p> <p>Cable 3 Reader Cable 6 Conductor 22 AWG (7x30) Shielded Bare Copper</p> <p>Cable 4 Lock Power 4 Conductor 18 AWG (7x26) Bare Copper</p>	<p>Cable 1 .110" (2.79mm)</p> <p>Cable 2 .148" (3.76mm)</p> <p>Cable 3 .182" (4.62mm)</p> <p>Cable 4 .189" (4.80mm)</p>	.410 inch (10.41mm)



Color Code	
Door Contact	White
REX/ Spare	Blue
Reader	Orange
Lock Power	Gray

WEST PENN WIRE

Cross-Reference

Company Name	Proximity and Wiegand Readers	Smart Card Readers	Magnetic strip	Bar Code Reader	Biometric Reader	Mifare Reader	RS-485
Access Specialists	3855, 3270	--	--	--	--	3272	D4851, D2401
Access Control Technologies	3651, D3651	--	--	--	--	--	D4852, D2402
Dorado Systems	270, 3270	--	--	--	--	--	D4851, D2401
Casi- Rusco	3244, 3262, 3855, 3270, 3263	3244, 3262, 3855, 3270, 3263	D439	D439	--	--	D4851, D2401
Cansec	3855, 3270 3264 Cansec	--	--	--	3270	--	D4851, D2401
Indala	3855, 3270, 3271	--	--	--	3270	--	D4851, D2401
HID Corp.	3855, 3270, 3271	3271	--	--	3264	--	D4851, D2401
Keri Systems	3270, 3271	--	--	--	--	--	D2401
Bioscript	--	--	--	--	3855, 3270	--	4245
SecuraKey	3262, 3263	--	--	--	--	--	D4851, D2401
AWID	3855, 3270	--	--	--	--	--	D4851, D2401
CheckPoint	3280, 3271, 3021 Proximity	--	--	--	--	--	D4851, D2401
Galaxy Systems	3855, 3270	--	3263	3271	--	--	D4851, D2401
Hirsch Electronics	3651	--	--	--	--	--	D4851, D2401
Identicard	3855, 3262, 3280 3153, 3753	--	--	--	--	--	D4851, D2401, D3651
Info Graphics	3270, 3271 3274 keypads	--	--	--	--	--	D4851, D4853, D431
Pac Portico	240, 3855	--	--	--	--	--	D4851, D2401
Synergistics	D431 D510	--	--	--	--	--	D4851, D2401
Position Technologies	3270, 3271 3021, 3282	--	--	--	--	--	D4851, D2401
International Electronics	3270, 3263, 3021	--	--	--	--	--	D4851, D2401
Linear Corporation	3262, 3263 D2403	--	--	--	--	--	D4851, D2401
Essex Electronics	3270	--	--	--	--	--	D4851, D2401
RF Logic, Inc.	3855, 3270	--	--	--	--	--	D4851, D2401
Kantech	252, 272, 283 3021, 3651	--	--	--	--	--	D4852, D2402
Corby	270, 3270, 3271	--	3270	3270	--	--	D4851, D2401
CardKey	--	--	--	--	--	--	D4852, D2402
Sensormatic	3855, 3270	--	--	--	--	--	D4852, D2402, D4851
Securitron	3273, 3265	--	--	--	--	--	D4852, D2402, D4851
Northern Computers	3244, 3021 3283 Keypad	--	--	--	--	--	D4852, D2402, D4851
HISEC		--	--	--	--	--	D4852, D2402, D4851
Lenel		--	--	--	--	--	D4852, D2402, D4851

Note: West Penn Wire/ CDT recommends that you Consult with the Access Control Manufacturer for appropriate conductor count, AWG size, and shielding requirements.

Note: West Penn Wire/ CDT recommends:
Request to Exit -- 241 or 3241
Alarm cable: 291

Lock Power: 224, 244 or 3244
Door Contact: 221 or 291