



AUDIO EQUIPMENT

COMPLETE SCHOOL BUS SOLUTIONS



CONTENTS

RADIOS	4
RADIO COMPARISON	6
PANEL MOUNTED PA SYSTEMS	7
BLUE BIRD RADIO HARNESSSES & ACCESSORIES	8
THOMAS RADIO HARNESSSES & ACCESSORIES	12
IC RADIO HARNESSSES & ACCESSORIES	16
ADDITIONAL ACCESSORIES	20

Fully integrated solutions from a ONE SOURCE leader.

Radio Engineering Industries (REI) is proud to be the premier innovator, manufacturer and supplier of audio/visual solutions to the transportation industry. For more than 75 years, this family-owned company has earned a reputation in delivering first-class engineered products that promote safety.

Why REI is Superior

- One source provider for engineered products.
- Over 75 years of industry knowledge leading the mobile market.
- Products designed, engineered and developed in the USA.
- We'll never leave you stranded with 24/7/365 customer support.

connect. protect. inform.

how-to guide

A step-by-step process for selecting the correct radio, PA and accessories for your vehicle.

STEP 1

Identify manufacturer, model and year of your vehicle.

STEP 2

Select your radio.



CD-5000



CD-3000



ST-4000



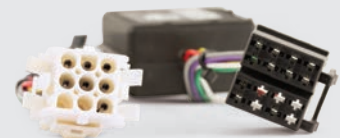
ST-3000

Add optional PA kit



STEP 3

Select your radio harness and accessories by your vehicle manufacturer, model and year.



CD-5000 AM/FM/CD/BT Stereo Radio



- Bluetooth connectivity for audio streaming and hands-free calling
- iPod/iPhone charging
- Front Aux input for MP3, iPod, and other portable media players
- Rear type A USB input

ITEM	PART #
CD-5000	710437

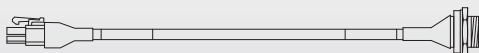
ST-3000 AM/FM/WB Stereo Radio



- Front and rear Aux input for MP3, iPod, and other portable media players
- 7 weatherband channels

ITEM	PART #
ST-3000	710374

Add Optional CD-5000/ST-3000 PA Kit



ITEM	PART #
Carbon Microphone PA Kit	750322
Includes:	
Handheld Carbon Microphone w/3' Coiled Cable - 4 Pin Straight CB Style Connector	480024
Microphone Mounting Clip	480201
3' Cable w/4 Pin Male Mini-Fit™ to Microphone Jack	512200

CD-3000 AM/FM/CD Stereo Radio



- Front panel SD/SDHC card input
- Compact disc with anti-skip mechanism
- Front and rear Aux input for MP3, iPod, and other portable media players
- Front panel type A USB input

ITEM	PART #
CD-3000	710430

ST-4000 AM/FM/WB Stereo Radio



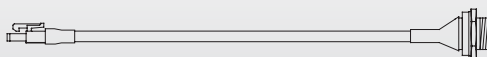
- Front panel SD/SDHC card input
- Front and rear Aux input for MP3, iPod, and other portable media players
- Front panel type A USB input

ITEM	PART #
ST-4000	710295

Add Optional CD 3000/ST-4000 PA Kit



480024



512365

ITEM	PART #
Carbon Microphone PA Kit	750323
Includes:	
Handheld Carbon Microphone w/3' Coiled Cable - 4 Pin Straight CB Style Connector	480024
Microphone Mounting Clip	480201
3' Cable w/3 Pin Male Mini-Fit™ to Microphone Jack	512365

For radio comparisons, see page 6.

RADIO COMPARISON



CD-5000 CD-3000 ST-4000 ST-3000

Power rating	50 Watt x 4	50 Watt x 4	50 Watt x 4	50 Watt x 4
Compact Disc w/Anti-skip mechanism	✓	✓		
MP3/WMA Playback	✓	✓	✓	
Front-panel SD/SDHC card input		✓	✓	
USB				
Front-panel type-A input		✓	✓	
Rear type-A input	✓			
Cellphone charge port in USB MODE	✓	low current devices only	low current devices only	
Bluetooth®				
Audio streaming	✓			
Hands free calling	✓			
iPod®/iPhone® ¹				
Built in iPod charging	✓			
Built in iPhone charging	✓			
Built in iPod controls	✓			
AUX				
Front panel connects iPods, MP3 players and portable media players	✓	✓	✓	✓
Rear / RCA audio input jack	✓	✓	✓	✓
Radio Connector				
ISO	✓			✓
16 Pin		✓	✓	
PA				
Integrated PA	✓	✓	✓	✓
Carbon microphone PA inputs	Selectable Menu-1 (4 Pin)	1 (3 Pin)	1 (3 Pin)	Selectable Menu-1 (4 Pin)
PA triggered digital media pause		✓		
WB (Weather Band)	✓	✓	✓	✓
Preset stations	18 FM / 12 AM 7 WB	18 FM / 12 AM 7 WB	18 FM / 12 AM 7 WB	18 FM / 12 AM 7 WB
USA/EURO radio frequency modes	✓	✓	✓	✓
Radio station lock out		✓	✓	
Station presets stored during power loss	✓	✓	✓	✓
Clock	✓	✓	✓	✓
30 day clock backup	✓			✓
RDS text ²		✓		

¹ Earlier model iPods are not supported because they do not implement the USB control protocol. They may be connected to the radio using auxiliary inputs if available.

² Radio stations broadcasting RDS may not be available in your listening area.

panel mounted PA systems

Panel Mounted PA System

700829 - Universal



760501 - IC



760850 - Blue Bird



760211 - Blue Bird / Thomas



- 12 Volt
- 25 Watt power output
- Single channel
- Volume control
- Interior/external speaker selection (not included on 2" x 7" panel)

ITEM	PART #
Panel Mounted PA System - 2" x 7"	700829
Panel Mounted PA System - 2.875" x 10.5"	760501
Panel Mounted PA System - 4" x 9"	760850
Panel Mounted PA System - 4" x 12"	760211

Each PA System Includes:

Handheld Carbon Microphone w/3' Coiled Cable - 4 Pin Straight CB Style Connector	480024
--	--------

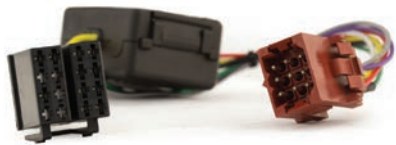
BLUE BIRD

VEHICLE MODEL	RADIO ONLY	RADIO W/PA KIT	HARNESS/CONNECTOR	MOUNTING PLATE*	MIC EXTENSION CABLE
2001 and Newer					
All-American Series	CD-5000 ST-3000		512210 ISO Connector to 9 Pin Connector	610063 4"x9" Mounting Plate	NA
		CD-5000 ST-3000	512215 ISO Connector to 9 Pin Connector w/Interior-Exterior Panel Switch	610034 4"x9" Mounting Plate	512129 20' Carbon Cable - 4 Pin Male Mini-Fit™ to Radio (4 Pin Female Mini-Fit™)
	CD-3000 ST-4000		512466 16 Pin Mini-Fit™ Connector to 9 Pin Connector	610063 4"x9" Mounting Plate	NA
		CD-3000 ST-4000	512459 16 Pin Mini-Fit™ Connector to 9 Pin Connector w/Interior-Exterior Panel Switch	610034 4"x9" Mounting Plate	512518 20' Dynamic Cable - 3 Pin Male Mini-Fit™ to Radio (3 Pin Female Mini-Fit™)
Vision Series	CD-5000 ST-3000		512210 ISO Connector to 9 Pin Connector	NA	NA
		CD-5000 ST-3000	512310 ISO Connector to 9 Pin Connector w/Interior-Exterior Connector for Dashboard Rocker Speaker Selector Switch (not included)	NA	NA
	CD-3000 ST-4000		512466 16 Pin Mini-Fit™ Connector to 9 Pin Connector	NA	NA
		CD-3000 ST-4000	512468 16 Pin Mini-Fit™ Connector to 9 Pin Connector w/Interior-Exterior Connector for Dashboard Rocker Speaker Selector Switch (not included)	NA	NA
Nov. 1999-Dec. 2000					
All-American Series	CD-5000 ST-3000		512210 ISO Connector to 9 Pin Connector	610063 4"x9" Mounting Plate	NA
		CD-5000 ST-3000	512215 ISO Connector to 9 Pin Connector w/Interior-Exterior Panel Switch	610034 4"x9" Mounting Plate	NA
	CD-3000 ST-4000		512466 16 Pin Mini-Fit™ Connector to 9 Pin Connector	610063 4"x9" Mounting Plate	NA
		CD-3000 ST-4000	512459 16 Pin Mini-Fit™ Connector to 9 Pin Connector w/Interior-Exterior Panel Switch	610034 4"x9" Mounting Plate	NA
TC/2000	CD-5000 ST-3000		512210 ISO Connector to 9 Pin Connector	610087 4"x12" Mounting Plate	NA
		CD-5000 ST-3000	512215 ISO Connector to 9 Pin Connector w/Interior-Exterior Panel Switch	610032 4"x12" Mounting Plate	NA
	CD-3000 ST-4000		512466 16 Pin Mini-Fit™ Connector to 9 Pin Connector	610087 4"x12" Mounting Plate	NA
		CD-3000 ST-4000	512459 16 Pin Mini-Fit™ Connector to 9 Pin Connector w/Interior-Exterior Panel Switch	610032 4"x12" Mounting Plate	NA

*A mounting plate is required for radios mounted in bulkhead above the driver. Radios mounted in dash are DIN mounts and do not require a mounting plate.

Blue Bird Harnesses

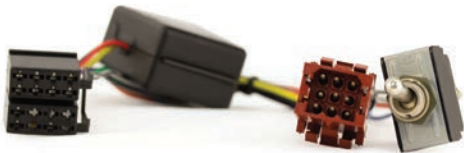
CD-5000 and ST-3000 w/ISO Connectors



512210



512310



512215

CD-3000 and ST-4000 w/16 Pin Mini-Fit™ Connectors



512466

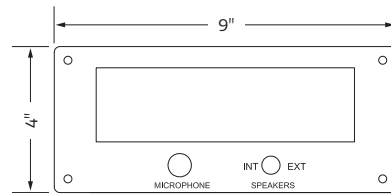


512468

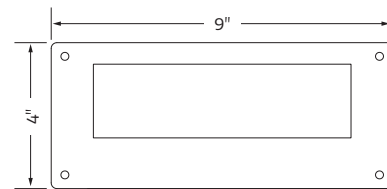


512459

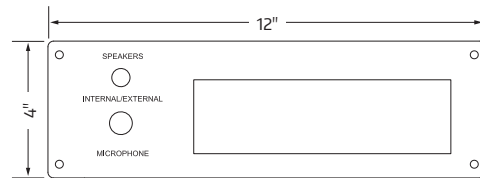
Blue Bird Mounting Plates



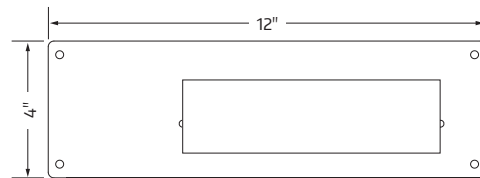
610034



610063

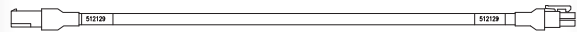


610032

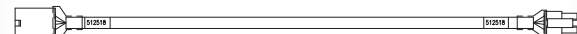


610087

Blue Bird Mic Extension Cables



4 Pin / 512129



3 Pin / 512518

Blue Bird Antennas

Flexible AM/FM Universal Mount Antenna



- Flexible, rust proof, wire wound mast w/rubber coating
- Split ball adjustable base w/included 60" antenna cable
- Male Motorola plug

ITEM	PART #
Flexible AM/FM Antenna w/60" Cable	210066
Flexible AM/FM Antenna w/192" Cable	210123
Replacement Rubber Mast	210067

AM/FM Steel Mast Telescoping

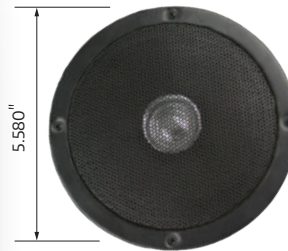


- 96" 4 section telescoping steel mast
- Dual mounting points
- Includes 96" antenna cable
- Male Motorola plug

ITEM	PART #
AM/FM Steel Mast Telescoping Antenna	210000

Blue Bird Speakers

One-Piece Speaker w/Grille



- Dual cone speaker
- 30 Watts max power
- 4 OHMS impedance

ITEM	PART #
6" One-Piece Speaker w/Grille	220026
Blue Bird Harness 4" One-Piece Speaker w/Grille and 2 Pin Mini-Fit™ Connector	230064

Weather Resistant Exterior Speakers



220022

- 15 Watts max power
- Aluminum housing
- 8 OHMS impedance
- Adjustable mounting bracket



220031PA

- 30 Watts max power
- 4 OHMS impedance
- Metal housing
- Adjustable mounting bracket

ITEM	PART #
5" PA Horn	220022
8" PA Horn	220031PA

mobile video surveillance solutions



With an extensive product portfolio, REI is the source for communication and safety solutions your school bus fleet requires. Our products are designed, manufactured and supported by REI, right here in the heart of America. More importantly, we provide 24/7 customer care directly from an REI employee for a peace of mind.

REI's Mobile Video Surveillance is engineered to keep you moving. Our system alleviates the potential risk you undertake everyday. Your hardware infrastructure serves as a support mechanism to maximize video viewing and performance. With a variety of cameras positioned in and around your vehicles, you lessen the uncertainty and create security for your passengers, vehicles and fleet.

Your system is equipped with a digital video recorder (DVR), high-resolution color cameras, user-friendly software and accessories creating administrative ease. The addition of wireless connectivity allows DVR, vehicle and fleet reporting to enhance efficiency and productivity.

We're ready to customize a system that moves your business forward. Call your REI representative today!

THOMAS

VEHICLE MODEL	RADIO ONLY	RADIO W/PA KIT	HARNESS/CONNECTOR	MOUNTING PLATE*
August 2003 and Newer				
Minotour, MyBus, Thomas/Freightliner FS-65, Saf-T-Liner Series	CD-5000 ST-3000		512256 ISO Connector to 14 Pin Mini-Fit™ Connector	NA
		CD-5000 ST-3000	512256 ISO Connector to 14 Pin Mini-Fit™ Connector	NA
		CD-5000 ST-3000	512522 ISO Connector to 14 Pin Mini-Fit™ Connector Interior-Exterior Panel Mount Speaker Selector Switch	NA
	CD-3000 ST-4000		512444 16 Pin Mini-Fit™ Connector to 14 Pin Mini-Fit™ Connector	NA
		CD-3000 ST-4000	512444 16 Pin Mini-Fit™ Connector to 14 Pin Mini-Fit™ Connector	NA
		CD-3000 ST-4000	512523 16 Pin Mini-Fit™ Connector to 14 Pin Mini-Fit™ Connector Interior-Exterior Panel Mount Speaker Selector Switch	NA
July 2003 and Earlier				
Conventional Prior to 1998, Saf-T-Liner Series Prior to 2000	CD-5000 ST-3000		512301 ISO Connector to 12 Pin Mini-Fit™ Connector	610087 4" x 12" Mounting Panel
		CD-5000 ST-3000	512521 ISO Connector to 12 Pin Mini-Fit™ Harness w/Interior-Exterior Panel Mount Speaker Selector Switch	610032 4" x 12" Mounting Panel
	CD-3000 ST-4000		512467 16 Pin Mini-Fit™ Connector 12 Pin Mini-Fit™ Connector	610087 4" x 12" Mounting Panel
		CD-3000 ST-4000	512499 16 Pin Mini-Fit™ Connector 12 Pin Mini-Fit™ Harness w/Interior-Exterior Panel Mount Speaker Selector Switch	610032 4" x 12" Mounting Panel
Minotour, Mighty Mite, Conventional After 1998, Vista, Saf-T-Liner Series After 2000, All Star EF	CD-5000 ST-3000		512301 ISO Connector to 12 Pin Mini-Fit™ Connector	NA
		CD-5000 ST-3000	512521 ISO Connector to 12 Pin Mini-Fit™ Harness w/Interior-Exterior Panel Mount Speaker Selector Switch	NA
	CD-3000 ST-4000		512467 16 Pin Mini-Fit™ Connector 12 Pin Mini-Fit™ Connector	NA
		CD-3000 ST-4000	512499 16 Pin Mini-Fit™ Connector 12 Pin Mini-Fit™ Harness w/Interior-Exterior Panel Mount Speaker Selector Switch	NA

*A mounting plate is required for radios mounted in bulkhead above the driver. Radios mounted in dash are DIN mounts and do not require a mounting plate.

Thomas Harnesses

CD-5000 and ST-3000 w/ISO Connectors



512256



512522



512301



512521

CD-3000 and ST-4000 w/16 Pin Mini-Fit™ Connectors



512444



512523

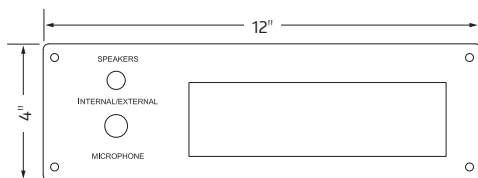


512467

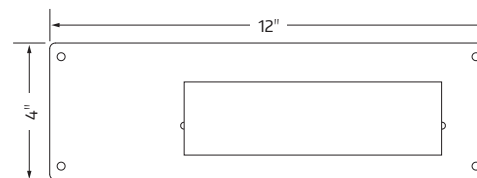


512499

Thomas Mounting Plates



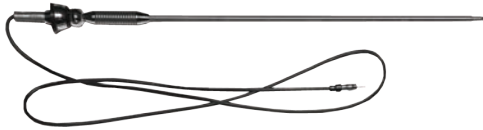
610032



610087

Thomas Antennas

AM/FM Top/Side Universal Mount Antenna

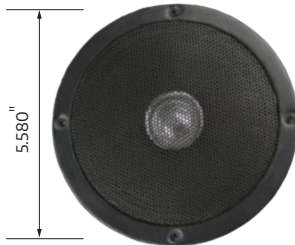


- Single section 31" steel mast
- Universal top or side mount/heavy-duty spring
- Includes 54" antenna cable
- Mast adjustable to 180 degrees
- Male Motorola plug

ITEM	PART #
AM/FM Top/Side Universal Mount Antenna	210098

Thomas Speakers

One-Piece Speaker w/Grille



- Dual cone speaker
- 30 Watts max power
- 4 OHMS impedance

ITEM	PART #
6" One-Piece Speaker w/Grille	220026

Weather Resistant Exterior Speakers



220022

- 15 Watts max power
- Aluminum housing
- 8 OHMS impedance
- Adjustable mounting bracket

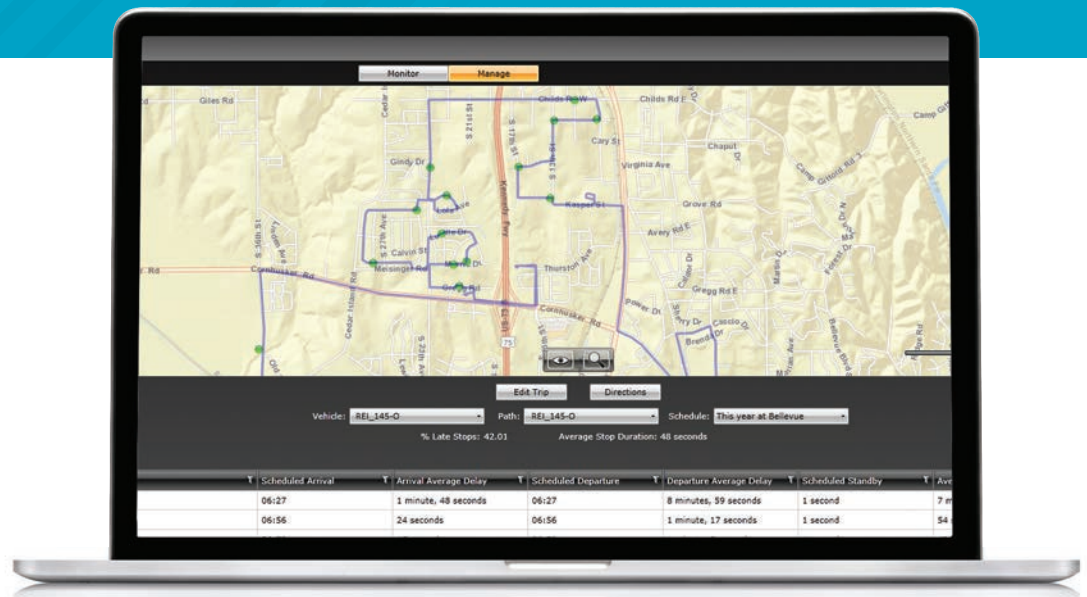


220031PA

- 30 Watts max power
- 4 OHMS impedance
- Metal housing
- Adjustable mounting bracket

ITEM	PART #
5" PA Horn	220022
8" PA Horn	220031PA

fleet management & stop-arm camera



REI provides the ease of functionality through A.R.M.O.R. software extensions. Formulated for a one-source solution, software extensions allow reporting, reconciling, monitoring and analyzing the health and status of your fleet. Utilizing the web-based software suite – Diagnostics, AutoPilot, StopArm, Insight, Route, Driver, Mobility and Live – coupled with Wi-Fi and commercial access point(s) accelerates cost savings and enhances your system for wireless reporting and surveillance coverage.



REI's automated stop-arm solution improves student and community safety by deterring and monitoring potential violators. REI's stop-arm package includes motion-activated high resolution, day/night sensor cameras that are optimized for viewing while compensating for vehicle headlights, providing a clear image of the front and rear license plates. Combine REI's stop-arm cameras with A.R.M.O.R.-StopArm for the most advanced automated stop-arm solution on the market today.

Call your REI representative today!

IC

VEHICLE MODEL	RADIO ONLY	RADIO W/PA KIT	HARNESS/CONNECTOR	MOUNTING PLATE*
2000 and Newer				
AE, BE, CE, FE, RE Series	CD-5000 ST-3000		512516 ISO Connector to 9 Pin AMP MATE-N-LOK Connector (Female Terminals)	610071 2.85" x 10.5" Mounting Panel
		CD-5000 ST-3000	512289 ISO Connector to 9 Pin AMP MATE-N-LOK Connector (Female Terminals) Interior-Exterior Panel Mount Switch	610033 2.85" x 10.5" Mounting Panel
	CD-3000 ST-4000		512517 16 Pin Mini-Fit™ Connector to 9 Pin AMP MATE-N-LOK Connector (Female Terminals)	610071 2.85" x 10.5" Mounting Panel
		CD-3000 ST-4000	512456 16 Pin Mini-Fit™ Connector to 9 Pin AMP MATE-N-LOK Connector (Female Terminals) Interior-Exterior Panel Mount Switch	610033 2.85" x 10.5" Mounting Panel
2000 and Older				
AE, FE, RE Series	CD-5000 ST-3000		512515 ISO Connector to 9 Pin AMP MATE-N-LOK Connector (Male Terminals)	610071 2.85" x 10.5" Mounting Panel
		CD-5000 ST-3000	512519 ISO Connector to 9 Pin AMP MATE-N-LOK Connector (Male Terminals) Interior-Exterior Speaker Selector Panel Mount Switch	610033 2.85" x 10.5" Mounting Panel
July 2003 and Earlier				
AE, FE, RE Series	CD-3000 ST-4000		512514 16 Pin Mini-Fit™ Connector to 9 Pin AMP MATE-N-LOK Connector (Male Terminals)	610071 2.85" x 10.5" Mounting Panel
		CD-3000 ST-4000	512520 16 Pin Mini-Fit™ Connector to 9 Pin AMP MATE-N-LOK Connector (Male Terminals) Interior-Exterior Speaker Selector Panel Mount Switch	610033 2.85" x 10.5" Mounting Panel

*A mounting plate is required for radios mounted in bulkhead above the driver. Radios mounted in dash are DIN mounts and do not require a mounting plate.

IC Harnesses

CD-5000 and ST-3000
w/ISO Connectors



512516

CD-3000 and ST-4000
w/16 Pin Mini-Fit™ Connectors



512517



512289



512456



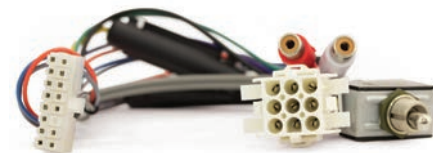
512515



512514

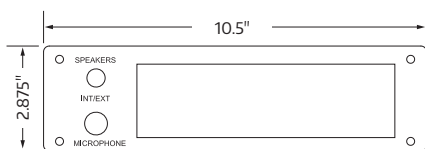


512519

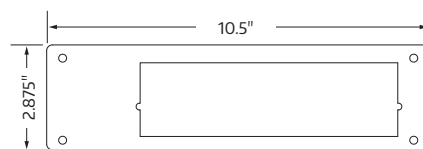


512520

IC Mounting Plates



610033



610071

IC Antennas

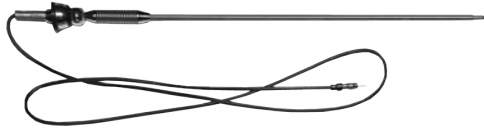
Flexible AM/FM Universal Mount Antenna



- Flexible, rust proof, wire wound mast w/rubber coating
- Split ball adjustable base w/included 60" antenna cable
- Male Motorola plug

ITEM	PART #
Flexible AM/FM Antenna w/60" Cable	210066
Flexible AM/FM Antenna w/156" Cable	210125
Replacement Rubber Mast	210067

AM/FM Top/Side Universal Mount Antenna



- Single section 31" steel mast
- Universal top or side mount/heavy-duty spring
- Includes 54" antenna cable
- Mast adjustable to 180 degrees
- Male Motorola plug

ITEM	PART #
AM/FM Top/Side Universal Mount Antenna	210098

AM/FM Steel Mast Telescoping

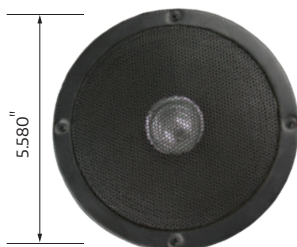


- 96" 4 section telescoping steel mast
- Dual mounting points
- Includes 96" antenna cable
- Male Motorola plug

ITEM	PART #
AM/FM Steel Mast Telescoping Antenna	210000

IC Speakers

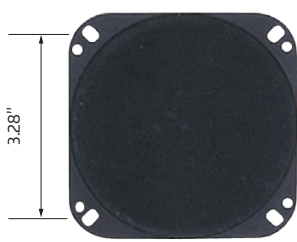
One-Piece Speaker w/Grille



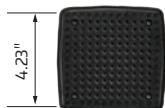
- Dual cone speaker
- 30 Watts max power
- 4 OHMS impedance

ITEM	PART #
6" One-Piece Speaker w/Grille	220026

4" Speaker



220040



240027

- Full-range speaker
- 30 Watts max power
- 4 OHMS impedance

ITEM	PART #
4" Speaker	220040
4" Grille	240027

Weather Resistant Exterior Speakers



220022

- 15 Watts max power
- Aluminum housing
- 8 OHMS impedance
- Adjustable mounting bracket



220031PA

- 30 Watts max power
- 4 OHMS impedance
- Metal housing
- Adjustable mounting bracket

ITEM	PART #
5" PA Horn	220022
8" PA Horn	220031PA

additional accessories

Radio Harnesses



512202



512439

VEHICLE	RADIO	VEHICLE CONNECTOR	PART #
Generic	CD-5000 & ST-3000 w/ISO Connector	Bare Wires	512202
	CD-3000 & ST-4000 w/Molex 16 Pin Mini-Fit™ Connector	Bare Wires	512439

USB Input Extension



- USB 2.0
- 10" cable
- Panel mount

ITEM	PART #
USB Input Extension for CD-5000	512485

Audio Cable

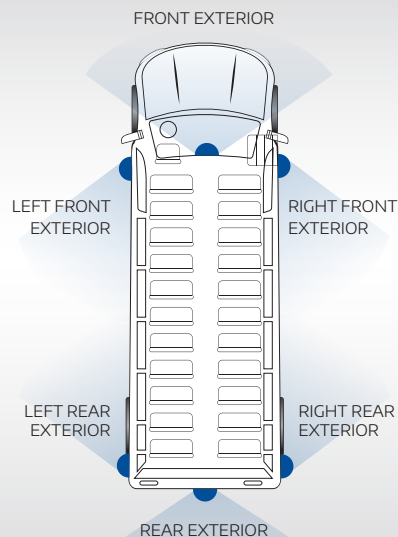


ITEM	PART #
6' Cable - 3.5mm Male to Male Slim-Plug Shielded Audio Cable	530169

CAMERA OBSERVATION

When you need extra visibility on the road, a versatile REI camera observation system gives you the edge you need. It can be the extra "eyes" required for blind spot protection and lane changing assistance, in addition to improving day and night visibility.

Call your REI representative today!

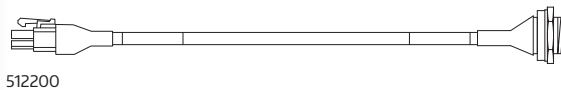
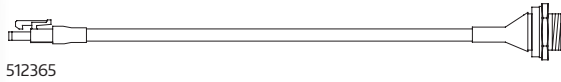


Antenna Extension Cables

Motorola Female to Motorola Male Plugs

ITEM	PART #
24" Extension Cable	530013
36" Extension Cable	530015
48" Extension Cable	530001
60" Extension Cable	530043
96" Extension Cable	530003
144" Extension Cable	530004
240" Extension Cable	530044

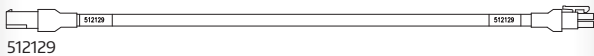
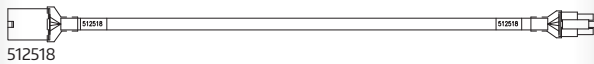
Carbon Microphone Jacks



Thru-Hole Mount

ITEM	PART #
3' Cable - Carbon 4 Pin CB Style Microphone Jack to Radio (3 Pin Female Mini-Fit™)	512365
3' Cable - Carbon 4 Pin CB Style Microphone Jack to Radio (4 Pin Female Mini-Fit™)	512200

Carbon Extension Cables



ITEM	PART #
20' Carbon Cable - 3 Pin Male Mini-Fit™ to Radio (3 Pin Female Mini-Fit™)	512518
20' Carbon Cable - 4 Pin Male Mini-Fit™ to Radio (4 Pin Female Mini-Fit™)	512129

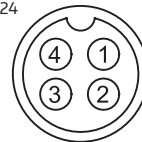
Carbon Handheld Microphones



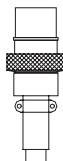
ITEM	PART #
Handheld Microphone w/3' Coiled Cable - 4 Pin Straight CB Style Connector Includes: Microphone Mounting Clip (480201)	480024
Handheld Microphone w/3' Coiled Cable - 5 Pin Straight CB Style Connector Includes: Microphone Mounting Clip (480201)	480271
Microphone Mounting Clip	480201

Carbon Microphone Connectors

480024

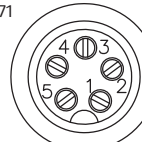


Pin Out View

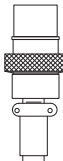


4 Pin CB Style

480271



Pin Out View



5 Pin CB Style

For additional products, contact REI at 800.228.9275.



REI provides Audio/Video solutions beyond the school bus market. Call your REI representative today! 800-228-9275.

- Media Players
- DVD Players
- Radios
- Monitors
- PAs
- Speakers
- Antennas
- Microphones
- Wi-Fi
- MegaMedia™



Lined writing area with horizontal lines and a large circular graphic on the right side.

REI

6534 L Street
Omaha, NE 68117

800.228.9275
402.339.2200

radioeng.com

