

Where can I obtain copies of all your instruction manuals?

You can download free copies of all Installation and Operation Manuals directly from the CVP Products website. The manuals contain complete step-by-step instructions along with a wealth of valuable tips. Our customers have rated them as the best, most informative manuals ever written about DCC. Go to our website document center and see for yourself. www.cvpusa.com

Will you analyze my track plan and make an equipment recommendation?

Yes, but there is usually a charge for this service. Also, your track plan must be in some kind of electronic form suitable for emailing. If you decide to accept the recommendation, then half of the analysis charge is credited against your **EASYDCC** purchase. Please call for details.

Where and how do I purchase your system?

CVP sells directly to you and passes along the savings in the form of lower pricing. You may order via phone, fax, internet or mail.

How do you ship purchases?

We use First Class Mail, Priority Mail and International Priority Air Mail. For an additional fee, we will use FEDEX or UPS.

What if I need help?

We offer free technical support for as long as you own your system.

What if I need something repaired?

Accidents happen and we understand that. Should you accidentally damage something, we can usually fix it for a nominal charge. Of course, we can't determine its reparability until we see it. If you think an item needs our repair services, please call first to discuss your problem. In many cases, the repair can be as simple as pushing a few keys. If we can't fix it over the phone, we will issue a return-material-authorization (RMA). Be sure to obtain this before sending anything to CVP. Call during normal business hours to obtain an RMA. Packages received without an RMA will encounter lengthy delays or might be refused.

How long has CVP been in business?

CVP Products was founded by Keith Gutierrez 1974. He has been the owner and chief architect since then. Although he now makes extensive use of the skills and talents of many other individual contributors, he continues to play a major role in establishing business goals, engineering specifications and customer support.

Do you have a money back guarantee?

Absolutely. There is a 30 day money back guarantee. If you decide not to keep the system, simply obtain an RMA and return everything to us in its original packaging. We will refund the complete purchase price, less the shipping cost.

How do you upgrade software and do you charge for the upgrade?

If you find a critical bug, we will fix it at no charge to you. Occasional system upgrades are announced via a flyer and offered for a nominal charge. Except for the T5000E and the RF1300E wireless throttles, software is contained in special chips that are socketed and can be changed by yourself. The T5000E and T1300E wireless throttle must be sent back to us should there be any upgrades. You can choose to upgrade or not. Even if you do not upgrade, your equipment is not obsolete and will be fully supported.

Can I buy used equipment and then have it repaired and upgraded?

Sorry but repair services and upgrades are reserved for original purchasers only. Save your money and purchase only new equipment - you be glad you did.

CVP Products

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EASYDCC™

Command Control System

Robust, Stable, Reliable

Performance Without Compromise and The Popular T1300E Wireless "OPS" Throttle



MADE IN THE USA

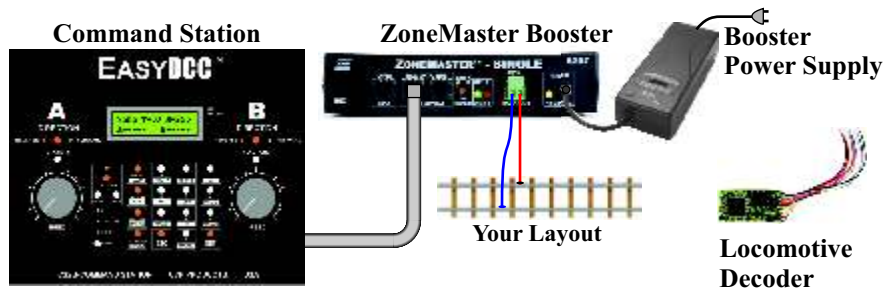
Designed and Manufactured In The USA By

CVP PRODUCTS



EASYDCC is a full featured command control system based on the popular NMRA standard called Digital Command Control (DCC). DCC makes locomotive control simple and fun while simplifying your layout's wiring. With just a single pair of wires, your layout can accommodate many independently controlled trains and many operators. This catalog showcases the various items that make up an **EASYDCC** system including basic starter systems as well as components to expand a starter system.

Each **EASYDCC** starter system has the same basic components: the Command Station, track booster and the booster power supply. Expanded and wireless starter systems include additional components as listed on page 6. The one item not included or described in any detail is the locomotive decoder since any NMRA-compatible decoder will work. Thanks to the DCC standard, all such decoders are compatible with **EASYDCC**. Let's take a closer look at these 3 major components.



The Command Station: is the brain of your control system. The Command Station takes in commands from sources, such as throttles, formats the commands into appropriate locomotive commands and sends out the finished information to the track boosters. The Command Station also provides a window into the status and operation of all the connected components. It has several diagnostic modes which can help pin down the cause of any odd operation issues. The Command Station automatically handles the complex and inter-dependent timing of throttle commands such that every operator is provided with excellent response to all locomotive commands issued from a throttle. More details and features are listed on page 7.

The ZoneMaster Booster and Booster Power Supply: provides power to the track for all of the locomotives equipped with NMRA-DCC compatible decoders. In addition, ZoneMaster boosters provide a reservoir of power for the high current sound decoders. All sound decoders have a huge inrush or surge current requirement when power is applied. The ZoneMaster coupled with the recommend booster power supply can supply up to 30 Amps of surge current without tripping the electronic circuit breaker. More details are shown on pages 8 and 9.

The Built-in Command Station Throttles: Unlike other systems that force you to purchase extra throttles, you'll be delighted to discover that the **EASYDCC** command station includes **TWO** built-in and independent throttles.

Expansion Options: your layout will grow and expand so **EASYDCC** is ready to expand when you are. For example, choose from wireless or plug-in throttles; or perhaps add extra boosters. When ever you are ready to expand, simply plug in the new items and enjoy. It could not be any easier.

Pricing/Quantities: Prices based on latest price list. Prices are subject to change without notice and some quantities may be limited.

Placing Orders: Phone, email and mail orders are accepted. General questions or inquiries should not be included with mail orders.

Payment: Cash, check, money order and VISA/Mastercard are accepted. All payments are to be made in USA dollars. Payment must accompany your order. Sorry, no CODs or purchase orders (POs). No Canadian personal checks or Canadian Postal Money Orders. All checks, including international checks, must be drawn on a USA bank.

Credit Cards: Be sure to include card type, card number, expiration date, name as shown on card and any other numbers shown on face of card. Also include the 3 digit CV# shown on the back of the credit card. Include the card billing zipcode if different than shipping zipcode.

Sales Tax: Texas residents must add 8.25% sales tax.

Delivery: Shipments are made via First Class Mail, Priority First Class and International Priority Air Mail. No UPS. FEDEX service is available on credit card orders for an extra charge. No CODs.

Returned Items: All 30 day return items must be 100% complete, original packaging, including all warranty cards, manuals, cables, accessories, components and original labels to be accepted. Incomplete returns will result in a delay of your refund, and possibly a restocking fee. Beyond 30 days, all returned items are subject to 15% restocking charge.

Do not send items to us for repair or refund without first obtaining authorization. In many cases, problems are easily solved via phone or email without the need or expense to return items to us. **If we authorize** and request you to return an item, be sure to mark the "Return Material Authorization" (RMA) number on the outside of the box. You are responsible for all shipping charges.

Refunds: Allow up to 15 business days for all refunds to be processed. All refunds are by company check.

Backorders: You may cancel a backorder at any time. If paying by check, a full refund will be sent. If paying by credit card, orders are not billed until shipment occurs.

Warranties: All equipment is warranted for 90 days from date of delivery. CVP will use commercially reasonable efforts to ship a replacement part within ten (10) working days after receipt of the RMA request. Actual delivery times may vary depending on customer location. After the 90 day warranty period, standard repair rates apply. Depending on the problem, CVP reserves the right to repair or replace.

Warranty Exclusions: This warranty does not cover any problems which result from improper installation, modifications, battery polarity reversal, improper operation, leaking batteries, excessive battery voltages, excessive motor current draw, connections to 3rd party circuit boards, abuse, accidents, or acts of God such as excessive heat, floods, damage caused by exposure to moisture and rain, lightning, earthquakes, volcanic events, tidal waves or hurricanes.

Contacting CVP: Email is the preferred and better way to send us questions about our equipment. Our goal is to respond within 1 or 2 business days. Normal business telephone hours are 10AM to 4PM Central Time, Monday thru Friday. If you reach our voicemail, don't just hang up. Please leave a message and a return phone number. We will return your call as soon as practical. We use caller ID to screen telemarketers so be sure to unblock your name and number before calling us to avoid unnecessary delays.

The ALR900 wireless receiver plugs directly into the Lenz system control bus and allows CVP's popular T5000E wireless throttles to work with your Lenz system. There are two types of receivers, FG1 or FG2. FG is the abbreviation for "Frequency Group." FG1 supports frequencies 0 to 7 and FG2 supports frequencies from 8 to 15. Each ALR900 can support up to 8 wireless throttles.



Supports Up To 16 Wireless Throttles

Each throttle uses its own private frequency providing fast response to function key presses. Since each throttle uses its own dedicated frequency, there is never any interference from other throttles.

Easy Setup

All setup switches are readily available on the front panel. You can select from the different options or change them at any time without opening the chassis.

Easy Connection To Lenz System

The ALR900 plugs right into the Lenz system's control bus without any changes. Power also comes from the control bus. This handy feature is helpful while determining the ALR900's location having the best overall reception - perfect for clubs and modular layouts.

Use With Lenz Tethered Throttles - Or Not!

The ALR900 may be used alone or right along with your existing Lenz plug-in throttles without any changes. For new installations, you may choose to use only wireless throttles and enjoy the freedom of no throttle bus wiring.

Lenz Wireless Receiver ALR900 [specify FG1 or FG2]. \$99

Command Station Serial Port Adapter



This custom-wired adapter converts the Command Station's modular computer port jack to a standard serial DB9 connector.

The adapter comes with up to 15 feet of modular cable. You may specify the desired length up to 15 feet long and the cable comes with modular plugs on both ends.

DB9RJ \$25

Custom Modular Cables



Six-conductor modular cable is used to make all connections between the Command Station and the ZoneMaster boosters. Bulk modular cable is sold by the foot plus \$3 for the plug set. Specify the length and feet and type of cable to be built - DATA OR TELCO.

- Modular Cable MOD6TELCO \$0.35 per foot**
- Modular Cable MOD6DATA. \$0.35 per foot**
- Modular Plugset \$3.00 per cable**
- 7 foot modular telco cable with plugs \$3.50**
- 7 foot modular data cable with plugs \$3.50**



One of the most popular components of an **EASYDCC** system is the wireless throttle. Wireless throttles have no cord nor do they need to be plugged in to use a locomotive. Just key in the locomotive number and you are ready to roll.

Precision Wireless Control: Precision wireless control capable of flawless locomotive control is the goal; and CVP Products, with more than 40 years of command control design experience, has met and exceeded that goal with the **EASYDCC** wireless throttle option. There are several attributes that describe the required performance levels for a wireless system.

Simple and Easy Operation: your operators must be able to pick up the wireless throttle and instinctively know how to operate their train. Changing the speed or direction and controlling locomotive functions should never take an elaborate set of instructions.

Fast Response: **EASYDCC** is optimized to provided fast response time when many throttles and locomotives are active. Up to 16 wireless throttles may be used simultaneously without interference with each other because each has its own dedicated frequency. No sharing is required.

Economical: Our wireless throttles offers premium features at a budget prices. Two different types are available each with different capabilities. Many of our customers have adopted wireless control as their only type of control, saving themselves both time and effort. With two different types of throttles, go ahead and cut the cord. You'll not regret the decision.

Use Multiple Wireless Receivers: The link between your wireless throttle and the Command Station is the XF-Series Wireless Receiver. For large layouts featuring group operation you can add additional wireless receivers to insure drop-out-free operation. Plus, there is no limit to the number of wireless receivers used.

Two Throttles To Choose From: The classic T5000 throttle features an easy to read graphical display where the active locomotive's speed and direction, plus the transmit frequency and the throttle ID number as clearly visible. The new T1300 "OPS" throttle features a slender case, single turn speed control, dedicated direction switch and a USB rechargeable battery. Both throttles also control accessory decoders.



The #1 Choice Of Serious Layout Owners!

CVP Products was established in 1974 and we've been designing model railroad electronics ever since. We offer experienced, dedicated technical support and are often called upon to help out other manufacturers. Everything is designed, built and tested in the USA which provides you with the assurance and peace-of-mind that we can service and support our products with a minimum of fuss.

A Full- Featured DCC System: When selecting a DCC system, always look beyond the hype and compare hard facts. The list below highlights some of the key specifications and requirements for a DCC system. Use it as a checklist when comparing other systems with **EASYDCC**.

<u>System Feature</u>	<u>EASYDCC</u>
Locomotive address range	1-9999
Tethered Throttle address Range	1-9999
Wireless Throttle loco address range	1-9999
Accessory Address Range	1-2048
Control accessories from Command Station	Yes
Control accessories from all throttles	Yes
Command Station Includes 2 Built-in Throttles	Yes
External Throttle Types	Plug-In, or Wireless
External Throttle Capacity	31
Loco Capacity	255
Built-in Programming Track	Yes
Supports All Programming Modes	Yes
Supports Standard Consisting	Yes
Supports Advanced Consisting	Yes
Mainline programming	Yes
Supports 14, 28, 128 speed steps	Yes
Socketed software for easy upgrades	Yes
Programs all available CVs	Yes
Free, built-in RS232 computer port	Yes
Accessory Decoder route control	Yes
Back-lit Display on Command Station	Yes
Wireless throttle with backlit display	Yes
Viewing Angle/Contrast Control	Yes
ZoneMaster Booster Capacity	8 Amps
ZoneMaster Booster Surge Capacity	30 Amps
Auto-reversing boosters	Yes
Manufactured and Serviced in USA	Yes

Don't Forget Easy, Economical Upgrades: We have designed **EASYDCC** for easy upgrades. This allows you to benefit from advances in technology as well as growth in your locomotive fleet. No changes are required to layout wiring, track wiring, decoders or boosters to make the upgrade. The upgrade consists of replacement software for your Command Station and throttles, in easy-to-plug-in chips.

Don't Forget Volume Discounts: Many of the EasyDCC components have generous quantity discounts. Get together with your friends to combine orders for big savings.

The **DISTYAMP**, short for Distribution-Amplifier, is perfect if your layout is large or irregularly shaped. Your Command Station has a single, modular jack Booster Driver output suitable for up to 5 ZoneMaster boosters and 200 feet of modular cable. The modular cable simply daisy chains from one booster to the next. But what if your ZoneMaster boosters are to the right AND the left of the Command Station? Or what if you plan for more than 5 ZoneMaster boosters? If either of these situations are similar to your layout design, then the DISTYAMP offers a simple solution.

The DISTYAMP features 4 independent modular cable ZoneMaster drivers and jacks. Each of the 4 drivers has the same capability as the Command Station's one ZoneMaster driver. All integrated circuits are mounted in their own sockets - just in case. Additional protection is provided to reduce the chances of driver damage should electrical storms frequent your area. Three mounting holes and the small circuit board make it easy to mount under the layout.

The DISTYAMP comes with its own universal power supply having an output voltage of +5VDC at 1.5 amps. The power supply plugs into any AC line from 95 to 240VAC input making it suitable for worldwide use.



Distribution Amplifier DISTYAMP \$39.95

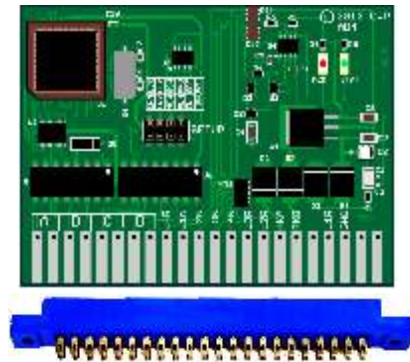
4 Output Accessory Decoder

The new AD4 has 4 independent outputs that may be used to control and drive devices such as switch machines, lights and other stationary devices.

Changing one of the setup jumpers configures the AD4 to drive 8 separate on-off outputs such as lamps or LEDs. Control can be from the command station, a plug-in or wireless throttle or from local push buttons.

The AD4 is ideal for tortoise or other low current switch machines. It also works with Kato and LGB style machines using just two wires. The outputs are each rated at up to 1Amp peak throwing current and 0.6 Amp continuous. Outputs can be set to be pulsed or continuous on or a combination of the two.

To simplify wiring, the AD4 plugs into the optional 22 pin edge connector. Wiring is done to the edge connector. If you don't want the edge connector, wiring can be done using the holes in the fingers of the connector. The new AD4 retains the same edge connector pin assignment as our classic AD4MC for easy upgrading and replacement.



Accessory Decoder AD4 \$35 (1-5)
\$31 (6 or more)

Edge Connector 22/44EDGE \$ 9 each



ZoneShare splits any ZoneMaster output into four independent and protected track driver outputs. Each output has its own protection and electronic circuit breaker. Any fault on one output will not affect the remaining outputs. No power supply is required. Power comes from the ZoneMaster.

Built-In Autoreverse. Output-A features a built-in autoreverse function and has its own sensitivity adjustment. If you don't need autoreverse, then it becomes just another independent output.

Four individual fault indicators. Each output has its own fault indicator and unique alarm buzzer. A short or overload will light the indicator and sound the buzzer making it simple and quick to pinpoint which zone has a problem.

The fault buzzer can be turned off. The front panel switches allow the buzzer to be turned on or off - whichever you wish. It can be changed at any time.

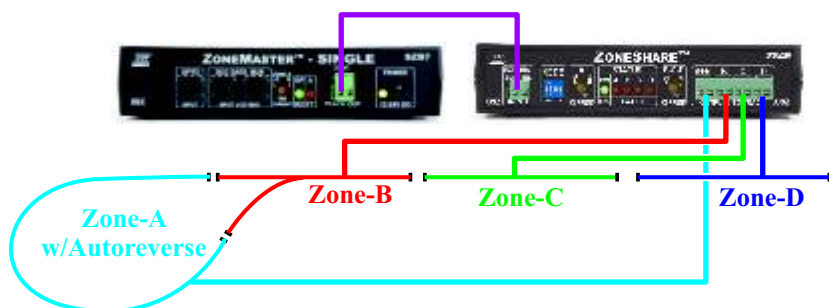
Economy model for under-layout mounting. Cost conscious users can get ZoneShare without the case. It is a circuit board only, assembled and tested, ready to mount under the layout. Mounting holes make it easy to mount under the layout.

The ZoneShare without a case uses a regular terminal strip for connecting wires.



ZoneShare without case

ZoneShare with case ZS	\$179.95 each qty = 1 to 3
	\$125.30 each qty = 4 or more
ZoneShare without case ZSX	\$129.95 each qty = 1 to 3
	\$103.96 each qty = 4 or more



Typical ZoneShare Hookup To ZoneMaster Single

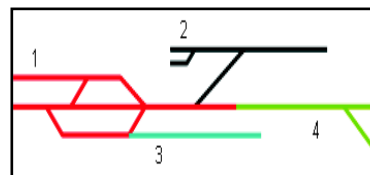
ZoneMaster Power Supply

DCPS120 Power Supply: This is the companion power supply used to power all of the ZoneMaster Boosters. It is one of the few power supplies available with a Universal AC Input. The DCPS120 will work with any common household AC line voltage from 100 to 240 Volts, making it suitable for any country in the world. The 120 Watt output provides a huge reserve of current to satisfy the surge current requirements of the booster.

ZoneMaster Power Supply DCPS120



\$55



Our award winning product line makes Command Control easy to install and simple to learn. You do not need a background in electronics or computers to enjoy the benefits of **EASYDCC**. However, if Command Control is new for you, we will start at the beginning and review some important decision points which will influence some of your basic choices.

What Type Of Layout Do You Have?

All of the **EASYDCC** Starter Systems will work for any layout or scale. How you use your layout and your available budget governs the selection of additional items to expand your system beyond the basic starter system capabilities.

How Many Operators On Your Layout?

New Layout Owner or Single User: If you use your layout or operate alone, then you need only one throttle to run a train. Of course you can use more than one throttle for multiple trains but here is where Command Control excels. If you simply run the trains in loops, you can use one throttle to start a train and then assign the throttle to another train. If this is your style of operation, our Basic Starter System is perfect for you. This basic system is designed for small, first time layout owners with plans for later expansion.

Multiple Users and Plug-In Throttles: If you need more than two throttles or enjoy your layout with a group of operators, then consider our Expanded Starter System. The Expanded System allows the use of tethered, walk-around throttles. Plug-In throttles include walk-around memory, so they can be unplugged and moved while the train continues to run.

Multiple Users and Wireless Throttles: This is the ultimate in walk-around freedom. Forget about cords. The Wireless Starter System adds the freedom of true walk-around control without any cords. The wireless throttles use advanced radio technology that easily penetrates common obstructions. Select locomotives right from the throttle - no need to plug in!

Wireless and plug-in throttles may be used at the same time.

How Many Track Boosters Do You Need?

Surprisingly, it is not the amount or length of track that determines the number of boosters. It is the quantity of locomotives occupying and operating on the track, *at the same time*, that determines the number and type of boosters required. Although a single booster can drive your entire layout, a derailment will shut down the entire layout. It is much better to use additional boosters each driving their own "center of operation" such as a town or yard. You can start with one booster and when your budget permits, add more boosters.

Where To Start? We Recommend A Starter System.

We have created three different Basic Starter System's packages. Each system is complete except for the locomotive decoders. All starter systems can be expanded at any time.

Basic Starter System: includes the Command Station which has two built in throttles, the high power, 7-Amp track booster and the matching booster power supply.

Extended Starter System: adds the throttle bus extender, transformer and an XR1300 plug-in throttle to the basic starter system. This is a perfect starting point if you are planning to use the plug-in style throttles. Don't forget to take advantage of quantity discounts for extra throttles.

Wireless Starter System: adds the XFG1 wireless receiver, its transformer, extra modular cable and a T5000E wireless throttle. If you prefer a T1300E wireless throttle, deduct \$20 from the WSS price. Wireless operation removes all the cords and offers the most freedom and flexibility.

Note: add boosters, throttles or other accessories to your basic starter system at any time. There is no need to remove or replace existing equipment. Expansion has never been easier!

EASYDCC Basic Starter System

- 1 CS2B Command Station
- 1 Modular Cable - 7 foot
- 1 DCPS120 Universal Power Supply
- 1 CS2B 12VAC Transformer
- 1 ZoneMaster-Single Booster
- 1 Operation and Installation Manual

Basic Starter System BSS **\$279**

For international orders, the 12VAC transformer is not suitable for 220/240VAC primary power. Order the BSS-nt which deletes the 12VAC transformer.

Basic Starter System BSS-nt **\$275**

EASYDCC Plug-In Throttle Extended Starter System

- 1 CS2B Command Station
- 2 Modular Cables - 7 foot
- 1 DCPS120 Universal Power Supply
- 1 Extender 12VAC 20VA transformer
- 1 Fascia Plate Assembly
- 1 CS2B 12VAC Transformer
- 1 ZoneMaster-Single Booster
- 1 Throttle-bus Extender
- 1 XR1300 Plug-in Throttle
- 1 Operation and Installation Manual

Extended Starter System ESS **\$429**

For international orders, the 12VAC transformer is not suitable for 220/240VAC primary power. Order the ESS-nt which deletes the two 12VAC transformers.

Extended Starter System ESS-nt **\$417**

EASYDCC Wireless Throttle Starter System

- 1 CS2B Command Station
- 2 Modular Cables - 7 foot
- 1 DCPS120 Universal Power Supply
- 1 T5000E Wireless Throttle
- 2 CS2B 12VAC Transformers
- 1 ZoneMaster-Single Booster
- 1 XFG1 Wireless Receiver
- 1 Operation and Installation Manual

Wireless Starter System WSS **\$529**

Wireless equipment is licensed for North/South American and Japan. It is not licensed for sale to Europe, or Pacific Rim countries.

Starter System Upgrades And Ordering Considerations

Upgrade Options: The ZoneMaster-Single may be upgraded to a ZoneMaster-Dual for the difference in price. The T5000E may be upgraded to a T5000EBL wireless throttle for the difference in throttle price. The T1300E throttle may be substituted for \$20 off the BSS price.

Consider Quantity Discounts: Several of the **EASYDCC** components offer quantity discounts. For example, if you need 3 more ZoneMaster boosters, they can be purchased at the quantity 4 discount when you purchase your starter system. Or you can order additional T5000E throttles and obtain the quantity discount when you place your starter system order.

Request For Quotation: For large orders, or consolidated orders, send us your list and request a quotation. It doesn't cost anything and the savings could be substantial.

The XR-1300 plug-in throttle is our most economical throttle available. It's rugged two-conductor phone-plug means it can handle many years of abuse without a complaint. Controlling a locomotive is simple: plug in the throttle, key in the locomotive number and you're ready to roll.

The throttle plugs into the CVP fascia plate socket described below with a coiled cord that stretches to 20 feet. When you are out of range, simply unplug the throttle and move to another fascia plate. The train will continue to run as you move between sockets.

The throttle does not require any batteries. It is lightweight and comfortable even during long operating sessions.

Quantity discounts start when you buy two or more throttles. And the quantity discount can be applied if you order another XR1300 throttle when you purchase your Extended Starter System.

Plug-in Throttle XR1300-4 **\$89.00** each
\$79.95 each, 2 or more



Plug-In Throttle Fascia Plates



The fascia plate kit provides two side-by-side sockets in which to plug in your walk-around throttles. Interconnecting the fascia plates is done with inexpensive, readily available coax cable and twist-on plugs. No special tools needed. The Assembled Fascia Plate is ready to install and comes with two twist-on plugs. No soldering is required.

The Kit Fascia Plate includes a pre-punched and painted metal face plate, circuit board, two F-type jacks, two headphone sockets and two twist-on coaxial cable plugs. Assembly and soldering takes about 5 minutes. The metal faceplate is also available separately.

Fascia Plate Assembled EDFA **\$15 (1) \$13.20 (2 or more)**

Fascia Plate Kit EDFK **\$12 (1) \$10.56 (2 or more)**

Metal Face Plate Alone EDFP **\$6 each**

Coax Plugs and Jacks

Twist-On Coax Connector (plug) **\$ 0.80 each**

F-Jack (PCB mount) JACK **\$ 0.50 each**



Throttle Bus Extender



This little circuit board drives the coax cable throttle bus. It is designed to mount under the layout near the Command Station.

There is no limit to the number of extenders that may be used. More Extenders can be added to the Command Station to connect additional wireless receivers or if more than 10 plug-in walk-around throttles are to be used.

Extender, Fully Assembled EDXA **\$49**

12VAC-2A Transformer for Extender 12NVT **\$12**

The ZoneMaster family of track boosters provide the power to drive your trains. They offer many exciting and easy to use capabilities as standard features. All **EASYDCC** Starter Systems come with the ZoneMaster Single Booster and the DCPS120 matching power supply. Together they provide unsurpassed power capacity suitable for the high current surges of sound decoders. There is absolutely no booster programming needed; select from the various options with simple switches.

High Current Capacity: The ZoneMaster series offers up to 8 amps of output current. This is continuous output making the boosters suitable for O scale locomotives. You can select the Single Zone to provide the full 8 amps or you can select the Dual-Zone which allows two independent zones to share the 8 amp capacity.

30 Amp Surge Capacity - A New Requirement: Locomotives with sound decoders cause a huge current surge on a booster when power is first applied or after the booster recovers from a fault. If your layout has lots of sound equipped locomotives, you will need this level of surge capacity to reliably operate these locomotives without tripping the short circuit protection especially if the locomotives are concentrated in staging tracks or a large yard.

Single Zone Booster: The SZB7 booster features a full 8 amps of output power. There is plenty of power to run lots of trains without any hesitation or loss of power. The 30 Amp surge insures there is plenty of power for staging yards holding many sound-equipped locomotives.

Single Zone with AutoReverse: The SZB7-AR has the same features as the single zone booster above except the output has built-in automatic reverse. The autoreverse trip level is adjustable.

Dual-Zone Booster with AutoReverse: Imagine having a booster that has multiple and independent outputs, or zones, built-in. No need to add expensive external devices to create two independent and protected outputs. The Dual-Zone Booster, DZB7, has this feature already built in so there is no need to hassle with wiring, complicated setup procedures or installation instructions. You may also use one of the DZB7's outputs as an autoreversing booster. Nothing extra is needed and the full surge current capacity is retained.

Each of the two outputs is protected against short circuits, overloads and overheating. If a derailment occurs, the affected zone shuts down without affecting the other zones. This is the perfect solution for both small and large layouts. The built-in fault indicators show which zone has been tripped.

Mix and Match Plus Volume Discounts: Large layouts will need a mix of single and dual zone boosters and the different boosters can be used at the same time. Volume discounts start at only 4 units



ZoneMaster Single Zone
Booster - 8 Amp

SZB7 \$79.95 (1-3)
\$63.99 (4+)



ZoneMaster Single Zone - Auto
Reversing Booster - 8 Amp

SZB7-AR..... \$89.95 (1-3)
\$71.46 (4+)



ZoneMaster Dual Zone - Auto
Reversing Booster - 8 Amp

DZB7..... \$149.95 (1-3)
\$104.97 (4+)

ZoneMaster Boosters require a regulated power supply for operation.
See page 12 for details on our matching high current DC power supply.

The **EASYDCC** Command Station is the brain of your system. Thanks to the powerful, modular architecture **only one is needed per layout**. Upgrades and enhancements are simple - just plug in a new chip. Many DCC users have switched from other DCC systems and upgraded to the **EASYDCC** Command Station and throttle system to enjoy the advantages of the superior design, ease of upgrading, easier operation and better throttles. Please give us a call if you are considering switching. We'll help you sort through what to keep and what to change.



Socketed software chip
for easy upgrades



Uses simple 12VAC wall
transformer and is
included with the
Command Station

Simple Setup And Operation

- ❖ Big, bright LCD display
 - ❖ Color coded, large, tactile keys
 - ❖ Clearly labeled key legends
 - ❖ Simple, logical command sequences
 - ❖ Two built in throttles
 - ❖ Memory backup battery for all settings
- ### Built-in Helpful Diagnostics
- ❖ Shows running tally on system capacity
 - ❖ Display always shows software version
 - ❖ Monitor locomotive's speed and direction
 - ❖ Displays decoder's function status
 - ❖ Monitor any throttle at any time
 - ❖ Allows use of 14, 28 or 128 speed steps

Simple Accessory Decoder Control

- ❖ Multiple route controls
- ❖ Up to 32 turnouts per route
- ❖ Use any NMRA-DCC accessory decoder

- ❖ 2048 unique accessory decoder addresses
- ❖ Activate routes from any throttle or the Command Station

Supports Mainline Programming

- ❖ Reprogram decoders while operating
- ❖ Change any CV value, including address
- ❖ Watch the change take effect while loco is running
- ❖ Supports mainline programming of the accessory decoders

Outstanding System Features

- ❖ Compatible with **ALL** NMRA-DCC decoders
- ❖ Up to 9999 unique decoder addresses
- ❖ Supports 31 plug-in and wireless throttles simultaneously
- ❖ **Free**, built-in RS232 serial computer port
- ❖ Mounts either horizontally or vertically
- ❖ Rugged steel plate with baked finish and easy to read legend

Award Winning Wireless Throttles

The T5000E wireless throttle is a big hit with all layout owners and has become one of our most popular throttles. The T5000E establishes yet another new benchmark for simplicity, capability and stability.

Inside this value priced throttle are features and capabilities that you've always wished for. Simple menus, on-screen messages, menus, icons and intuitive key sequences insure you always know what to do next.



- * 16 unique frequencies
- * Precision internal antenna
- * 8 locomotive memory slots
- * Last loco recall button
- * Linked locomotive address and radio frequency
- * 11 different transmitter power levels
- * 13 Decoder functions - Function 0 to Function 12
- * Auto-shut off timer with user selected time
- * Needs only two AAA batteries
- * Big speed knob for precision control
- * Available with and without LCD backlight
- * Sleek, comfortable, and rugged case

T5000E Wireless Throttle	\$159 each, 1-8;	\$127 each, 9 or more
T5000EBL Throttle with Backlight	\$179 each, 1-8;	\$141 each 9 or more
Belt-clip	\$6 each	

XF-Series Wireless Receiver



The wireless receiver provides the link between your wireless throttles and the **EASYDCC** command station. The XFG1 receiver can handle up to 8 independent throttles each on their own frequency. For another 8 independent throttles on 8 more frequencies, add the XFG2 receiver. The Installation and Operation manual has additional considerations when more than 8 throttles are to be used. An XFG1 frequency is included with the Wireless Starter System.

For large layouts, multiple receivers can be used to provide overlapping and redundant coverage insuring no reception issues. And since each throttle has its own frequency, you are assured of jam-resistant, stable and reliable wireless throttle operation.

Multiple receivers allow obstructions, long distances and other reception problems to be easily conquered. If you find an area with poor reception, simply plug in another receiver and connect it to the throttle bus.

XF Wireless Receiver - Group 1 XFG1	\$99
XF Wireless Receiver - Group 2 XFG2	\$99

Our most popular throttle, the new T1300E OPS wireless throttle, is designed for your layout operators. Many of the user changeable options of the T5000E are now fixed or inaccessible by your operators. For example, both the throttle ID and transmit frequency are internally selected and can't be accidentally changed by your operators from the keyboard.

By popular request, the OPS throttle has a rugged, precision, single turn potentiometer speed control plus a dedicated direction key. The pot is rugged enough to withstand your toughest operator yet offers smooth, precise locomotive speed control.

- * Built-in rechargeable battery lasts more than 50 hours
- * Rugged single-turn speed control
- * Dedicated direction key
- * Bright LED indicators
- * Supports Group-1 and Group-2 frequencies
- * Precision internal antenna
- * Fixed transmit power level
- * Fixed auto off timer
- * Internal switch for frequency select
- * Jumper selection for throttle ID
- * 13 DCC functions - Function 0 to Function 12
- * Slim, comfortable case (1 x 2 x 6 inches)
- * Available with or without matching charger and cable
- * Budget priced



T1300EC OPS Wireless Throttle Combo	\$139
Includes throttle, user guide, wall charger and interface cable	
T1300EX OPS Wireless Throttle w/o Charger	\$129
Includes throttle and user guide only	
USB2MCRO Interface cable for T1300 charger jack	\$6
3 foot cable with standard USB plug on one end and microUSB plug on opposite end	

Which Wireless Throttle Is Best For Me?

Pick the T5000E if:

- Need to see the speed and direction values
- Need easy to change frequency
- Need to see loco number
- Need variable transmit power level
- Need selectable speed steps
- Need selectable auto off timer
- Need memory for active locos
- Want to have more than 1 loco in memory
- Want quantity discounts

Pick the T1300E if:

- Prefer the slim case
- Want rechargeable battery option
- Want classic 1-turn speed pot
- Don't need to see active loco number
- Want ID not changeable by user
- Want frequency not changeable by user
- Budget is limited

T5000E and T1300E throttles can be used at the same time and can be used interchangeably. Just insure that each is using a unique frequency and ID number.