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**PROBLOX™ ALL-IN-1 CONNECTOR SYSTEM**

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ProBlox™ All-In-1 Connector System

The ProBlox™ and ProBlox™–D connector systems are cost-effective solutions for bundling numerous signals into one connector. ProBlox™ houses up to 16 video and 26 audio/control contacts while the ProBlox™–D system allows for up to 16 video contacts, 18 audio/control contacts and 2 Cat5e connectors for Data.

ProBlox™ and ProBlox™–D are field-terminatable with low-cost tooling and custom configurable for thousands of combinations. It can be used anywhere HD video, VGA, HDMI, DVI, analog/digital audio, control signals, or data need to be fed to a single location. Built of rugged and durable components, and offering true 75-ohm video contacts for HD signals, the ProBlox™ system reduces the number of individual connectors, eliminates clutter, offers easy plug-and-play operation and a clean, professional finished look.

The ProBlox™ system was designed to make set-up in schools, conference rooms, auditoriums, houses of worship, and mobile trucks simple. With the ProBlox™ system, everything is in one connector making this the first truly affordable field-terminatable solution on the market.
The ProBlox™ plug and receptacle house 16 HD-video contacts and 26 audio/control contacts. This ratio allows thousands of combinations of HD15, DB9, BNC, RCA, XLR, 3.5mm, terminal blocks, etc… The system is completely customizable based on your requirements and budget. Load only the contacts you need, or fill it completely for future expansion. BTX can manufacture a system to your specs or you can terminate it yourself.

**PLUG: CV-PB42P**
Knob version for quick & easy hand tightening to receptacle

**PLUG: CV-PB42PSC**
Slotted version screw that sits flush to hood

**RECEPTACLE: CV-PB42R**
Houses up to 16 HD-video contacts
Houses up to 26 audio / control contacts
Block made of high strength PBT plastic
Notched to prevent backwards mating
Keyed System - 288 combinations for unique mating

**HOOD: CV-PBH**
Rugged all metal housing
Rotating function- dual cable entrance at top or side
Adjustable cable clamp for excellent strain relief

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<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>CV-PB42P</td>
<td>Plug with knob, houses female coaxial contacts</td>
</tr>
<tr>
<td>CV-PB42PSC</td>
<td>Plug with slotted screw, houses female coaxial contacts</td>
</tr>
<tr>
<td>CV-PB42R</td>
<td>Receptacle, houses male coaxial contacts</td>
</tr>
<tr>
<td>CV-PBH</td>
<td>Hood for ProBlox™, accepts max cable bundle OD of 0.88” x 0.90”</td>
</tr>
<tr>
<td>CV-PBHNL</td>
<td>Hood for ProBlox™, provides larger opening when using side entrance. Accepts max cable bundle OD of 1.05” x 0.90”</td>
</tr>
<tr>
<td>CV-PBPHK</td>
<td>Panel mounting hardware kit (optional)</td>
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The patent-pending ProBlox™–D is the A/V industry’s first field terminatable system to incorporate multiple data, HD video, audio, and control signals in a single connector. ProBlox™–D is similar to our original ProBlox™ connector but has the added ability to handle data over Cat5e. Along with 16 HD-video contacts and 18 audio/control contacts, it also houses 2 Cat5e connections. This allows you to take advantage of all signal types, including HDMI, DVI and VGA. All of these signals can effectively be run over 1 or 2 Cat 5e cables making ProBlox™–D the ultimate “podium style” connector.

Incorporating Cat5e into the ProBlox™–D connector is a snap. Terminate RJ45 connectors on the end of your cable as you normally would and plug them right in the ProBlox™–D connector. It is that easy. If you are planning on using pre-made Cat5e assemblies, you must remove the boot prior to plugging it in.

*Cat5e assemblies with molded boots cannot be used.*

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**PROBLOX™–D: CV-PB50R**

- Houses up to 16 HD-video contacts
- Houses up to 18 audio / control contacts
- Houses 2 Cat5e connectors
- Keyed System - 288 combinations for unique mating
- Notched to prevent backwards mating
- Block made of high strength PBT plastic

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<tr>
<td>CV-PB50P</td>
<td>ProBlox™–D plug with knob, houses female coaxial contacts</td>
</tr>
<tr>
<td>CV-PB50R</td>
<td>ProBlox™–D receptacle, houses male coaxial contacts</td>
</tr>
<tr>
<td>CV-PBDH</td>
<td>Hood for ProBlox™–D</td>
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VIDEO CONTACTS: The coaxial contacts for the ProBlox™ system features an all-crimp 3 piece design. These true 75 ohm contacts have excellent electrical performance up to 3 GHz and are ideal for VGA up to uncompressed HD video applications.

There are currently two versions available; one for Belden’s miniature 75 ohm serial digital 1855A, 1855P cable (or equivalent), and one for mini hi-res cable. We recommend using our own WV-RGB5P mini hi-res but it does work with many other cables as well.

After being terminated to the cable, the female contact inserts into the plug with actuating screw and the male contact inserts into the receptacle with locknut. Complete coaxial contact termination instructions can be found on pages 8-9 of this brochure.

Features:
- True 75 ohm impedance
- 3 GHz bandwidth
- All-crimp 3 piece design
- Gold plated contact areas
- Heavy duty crimp ferrule for increased strength
- Separate contact works with Belden 1855A, 1855P and equivalents
- Separate contact works with BTX WV-RGB5P mini hi-res and equivalents
- Male Contacts - Return Loss 25dB to 3 GHz
- Female Contacts - Return Loss 21dB to 3 GHz

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<tr>
<td>CV-PBVC2</td>
<td>Male coaxial contact for Belden 1855A (or equivalent) - sold in bags of 10</td>
</tr>
<tr>
<td>CV-PBVC2</td>
<td>Female coaxial contact for Belden 1855A (or equivalent) - sold in bags of 10</td>
</tr>
<tr>
<td>CV-PBVC2</td>
<td>Male coaxial contact for Belden 1855A (or equivalent) - sold in bags of 10</td>
</tr>
<tr>
<td>CV-PBVC2</td>
<td>Female coaxial contact for Belden 1855A (or equivalent) - sold in bags of 10</td>
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AUDIO/CONTROL CONTACTS: The plug and receptacle utilize the same unisex audio/control contacts which have the unique ability to mate with themselves. Choose between the solder or crimp style versions. The crimp style pin requires the use of a tool to terminate. Insertion and extraction tools are also available for easy insertion and removal of these pins and can be found on the opposite page.

CRIMP VERSION: CV-PBAC

Audio/Control crimp contact, unisex - sold in bags of 100

SOLDER VERSION: CV-PBAS

Audio/Control solder contact, unisex - sold in bags of 100
**TOOL: TV-PBCT**
Indent crimp tool handle and reversible male/female positioner for coax center contact pin

**TOOL: TV-PBPDG**
Pin depth gauge

**TOOL: TV-PA2652 & TV-PA2648**
The TV-PA2652 Paladin crimp die is for use on the ferrule of RGB5P (mini hi-res) coax contacts and the TV-PA2648 Paladin crimp die is for use on the ferrule of 1855A coax contacts.

**TOOL: TV-PA1302**
Paladin crimp tool handle for use with coax contacts

**TOOL: TV-PBEXTF & TV-PBEXTM**
The TV-PBEXTF extraction tool for female coax contacts and the TV-PBEXTM extraction tool for male coax contacts.

**TOOL: TV-CSTK715A & TV-CSTK715B**
These automatic stripping tool kits from Coasel allow you to strip the coax in a “pencil sharpener” type fashion. Both kits contain: hand held driver with removable Ni-Cad battery pack, AC charger and carrying case. The TV-CSTK715A kit contains one cutter head for use with RGB5P mini hi-res and ProBlox coax contacts and the TV-CSTK715B kit contains one cutter head for use with 1855A and ProBlox coax contacts.

**TOOL: TV-CCHRGB5PPB & TV-CCH1855APB**
Coastel cutting heads can be purchased individually if you already own the tool. The TV-CCHRGB5PPB is set with strip dimensions specifically for RGB5P and the ProBlox contacts. The TV-CCH1855APB is set with strip dimensions specifically for 1855A and the ProBlox contacts.

**TOOL: TA-516280201**
Crimp tool for audio/control contacts

**TOOL: TA-516280300 & TA-516280400**
The TA-516280300 is the required extraction tool for audio/control contacts and the TA-516280400 is the insertion tool for audio/control contacts.
Coax Termination Instructions

Place ferrule on coaxial cable and strip to lengths shown below.
NOTE: Due to the precise nature of these connectors, these dimensions are important.

FEMALE
CV-PBVCF2 or CV-PBVCFG

MALE
CV-PBVMC2 or CV-PBVCMG

Set indent tool TV-PBCCT to proper positioning and insert pin as shown.

Unscrew cap, slide positioner out, re-insert positioner with respect to connector being assembled: M side is for CV-PBVMC2 or CV-PBVCM2G (as shown above), F side is for CV-PBVCF2 or CV-PBVCFG

Crimp center contacts using TV-PBCCT properly set to male/female position.

Insert cable/contact into connector body as shown.
NOTE: These pins do not snap in place, you must insert fully for proper configuration

Slide ferrule into place, place pin depth gauge to end of connectors, set pin depth with TV-PBDG as shown. Use caution in handling after setting pin depth.

Crimp ferrule with specified hex crimmer to complete assembly.
Coax Termination Instructions

**ProBlox™ installation instructions for coaxial contacts**

Install assembled cable with connector in probox body (note orientation of block).

Insert from rear side of block

Press firmly to compress retainer

Push thru until retainer snaps into locked position

**Female**

CV-PBVCF2 or CV-PBVCFG

**Male**

CV-PBVC2M or CV-PBVC2G

Plug CV-PB42P or CV-PB42PSC

Receptacle CV-PB42R

**ProBlox™ removal instructions for coaxial contacts**

Select proper tool for gender of coaxial connector. Place tool tip over contact to be extracted. Push plastic handle firmly all the way in, to disengage retainer. Keeping pressure on the plastic handle, push plunger to eject connector from hole and connector will dislodge from seat. It must be pulled out by hand to replace. Contacts can be re-inserted into proper position after removal.
Assemblies, Mounting Solutions

ProBlox connectors can be purchased for field termination with simple hand-tools or as completed assemblies, panels, wall plates, breakout boxes, floor pockets, or cable reels. As a CTS Certified company, our sales engineers and Belden Certified assemblers will create the most elegant, custom tailored solutions for your job.
Our highly trained technicians utilize automated tooling and apply special sleeving options to make sure your assemblies are clean, professional and ready to install—hassle-free. Already know what you need? Send us your drawings and we’ll do the rest. BTX will not only turn your quote around quickly, typical assembly lead times run just 2-5 days. Questions? Just give us a call.