Frequently Asked Questions
pro-xi® Workstation Integrator, Series 100

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1. **What is a pro-xi Workstation Integrator and how does it work?**
   A Workstation Integrator is an electronic appliance designed to enhance the performance and strategic output of operators in Control Rooms and Operations Centers. Those performing mission-critical functions in Command and Control Centers become more effective and efficient.

   With a Ross Workstation Integrator, you can organize and display critical information from multiple systems in a way that enhances you and your operators' ability to recognize and act upon that data. Simultaneously, you now have a more natural way of directing control input to the various systems, as needed.

   Control room operators can simultaneously view and control multiple, disparate, computer systems on a single integrated workstation, using one mouse and one keyboard.

2. **What is an "Integrated Workstation?"**
   An integrated workstation is a workstation connected to a pro-xi Workstation Integrator device.

3. **How easy is setting up and connecting a pro-xi Workstation Integrator to our controlled systems?**
   You'll find the installation of a Workstation Integrator to be unbelievably simple. Run appropriate video and signaling cables between the operator's work position, the pro-xi device, and the systems being controlled. Plug in the power cord. The Workstation Integrator turns on automatically.

If the pro-xi unit is further than 15 feet away from the inputs or the output monitors, then you will need to connect the devices with KVM extender pairs on both the input and output side. The same is true if you are connecting the pro-xi chassis to a KVM switch.

The pro-xi input ports are DVI-I connectors, you may need appropriate adapters.

4. **What new software, drivers, or downloads do we need to install on the incoming computer systems in order to connect them to the pro-xi chassis?**
You need NO new software, NO new drivers, and NO downloads. Using a Workstation Integrator requires NO changes to the systems being controlled.

5. **How does using a pro-xi Workstation Integrator improve Control Room operations?**
Operators are improving control room, workflow processes and output.

Human operators are often required to notice small changes in complex operating environments. Detecting these changes is often very difficult when multiple displays are spread all over a work area. Typically, the operators in a traditional control center are not always able to position system displays to be most conducive to effective workflow. Even if the displays are arranged optimally for one particular task, as operational requirements change and evolve, often over the course of a single work session, the same display layout can become awkward and inefficient for the operator.

With a Workstation Integrator, an operator can create multiple views of the various systems by scaling and positioning display information on the integrated display; the operator can then save those layouts and recall them later with a simple keystroke. As work requirements change, the operator can quickly change to a layout that is most efficient for the task at hand. (Do more, work faster, spend less.)

6. **What systems can I control with a pro-xi Workstation Integrator?**
You can connect any system that provides a standard HDMI, DVI, or VGA video output, and which accepts standard USB keyboard and mouse inputs.

Operation of the Workstation Integrator is independent of the system being controlled.

Some of the many computer systems that can be controlled by the Workstation Integrator include Unix, Linux, OSX, DOS, and the various versions of Windows. The Workstation Integrator will also work with custom control systems with standard HDMI/VGA/DVI interfaces.

Remember that different operating systems can be connected to the same Workstation Integrator. For example, you could be operating a Linux, a DOS, and a proprietary system all from the same workstation.

7. **How many systems can I control through my pro-xi unit?**
The standard, series 100 pro-xi unit comes ready to interface with eight separate, disparate, incoming systems and can drive two, output monitors. The chassis contains eight incoming system cards (ISC) and two video output cards (VOC).

8. **How do I accommodate more systems?**
You can connect the pro-xi unit to a KVM matrix, and then populate the pro-xi Integrated Workstation with any eight of the critical computer systems connected to the matrix.

9. **Can we cascade multiple pro-xi units together?**
No

10. **Why is workstation integration important to control room operators or managers?**
In countless operations and control centers around the world, the proliferation of computer and control systems has created a nearly chaotic crisis of information overload. Many of you working in control centers are required to monitor and control 12, 18, or more separate systems in order to perform your work properly. Information that you and your operators need to perform your tasks is scattered across various display devices and control panels. Your KVM infrastructure may have you controlling several hundred inputs.

    With a Ross, pro-xi Workstation Integrator, you, your operators, and others can finally organize, save, and recall layouts of information from multiple systems that facilitate efficient operation.

    Using real-time thumbnails for overviews and live, scalable sub-windows for focusing on details, your operators can create multiple views of the information on all systems. With a pro-xi unit, you can facilitate much more efficient operations.

    Your newly-developed ability to instantly switch between saved layouts make adapting to different operating scenarios much easier.

11. **What additional functionality does a Workstation Integrator provide over a traditional KVM matrix?**
Traditional KVM technology allows the operators to view and manage only one connected system at a time and typically only accommodates one type of operating system. The pro-xi Workstation Integrator provides the operators synergistic, expanded functionality. An integrated workstation, connected to a KVM matrix, allows one operator to simultaneously view and control multiple, disparate, computer systems on one integrated monitor. The operator can populate the integrated workstation with any eight of up to hundreds of inputs connected to the matrix. The pro-xi unit can simultaneously view and control multiple computer systems each using a different operating system, if necessary.

In addition, once the connected computer systems are being controlled by a pro-xi integrated workstation, the operator has many additional features and capabilities for managing the data from various control systems. The ability to create live sub-windows, resize and re-position the data, create, save, and instantly recall layouts, and other features provide superior efficiency, greater effectiveness, and reduced risk.

The combined power of a pro-xi Workstation Integrator with a KVM switch is unprecedented. More than just the essential, missing element to the KVM matrix, workstation integration propels KVM technology into another, more robust dimension.

You could connect more than one pro-xi box to the KVM matrix thereby expanding simultaneous control over many, disparate computer systems.

12. **How many operator-customizable layouts can the pro-xi system accommodate?**
Operators can save up to 99 different layouts, each one instantly accessible with a simple keystroke.

13. **How does connecting a pro-xi Workstation Integrator with KVM technology create Virtual Control Room capability for your strategic operations?**
With workstation integration, operators have instant and simultaneous control over multiple, disparate, computer systems on a single display. Combined with KVM technology, you can now facilitate pro-xi control to any workstation, anywhere on your network, to any building on campus, any room in the building. For emergency meetings, no longer do you have to bring all participants to the control room.

A Workstation Integrator enhances the decision-making capability of operators and managers by presenting information from multiple sources on a single workstation, allowing the operator to simultaneously and interactively manage those systems, and provide that robust level of control anywhere on the network. If your control center employs KVM switches in your operation, you can easily wrap their usage into your Workstation Integrator, thus synergistically increasing the value of your KVM network.

14. **What current KVM equipment does the pro-xi unit connect with?**
The pro-xi unit has successfully connected to and is used in conjunction with most high-end, quality KVM extenders.

15. **What additional functionality does a Workstation Integrator provide over a traditional Monitor Wall or Video Processor?**
A traditional monitor wall allows your operators to view and monitor a few inputs; a pro-xi Workstation Integration allows you many more capabilities from managing multiple, disparate systems simultaneously, creating live sub-windows of mission-critical information, to saving and instantly recalling critical layouts. Workstation Integration raises the bar on existing technology and creates a new, revolutionary, and strategic product category.

Multiviewers are about viewing. Workstation Integrators are about improving the decision-making process in control rooms.

A Workstation Integrator treats multiple, disparate, computer systems much like traditional computers treat multiple applications operating on top of one operating system (OS). The various windows on a traditional computer monitor represent different applications; the various windows on an Integrated Workstation monitor represent different computer systems.

Control Room and Operations Center operators, using Workstation Integration, perform their strategic, core functions better — accessing data, managing systems, using various computers to make decisions. They can manage, interact, and manipulate data from multiple, disparate computer systems to do their jobs better; and they do this from a single, Integrated Workstation. They operate more efficiently within their workflow processes and protocols.

Image processors provide static, video display from various sources, typically computers using the same operating system, for viewing and monitoring; they do not provide for strategic, interactive management of systems or computers.

Workstation Integration includes the sub-technologies of monitor walls, video processors, routers, and other similar capabilities, but elevate the use of computers to a much higher and more strategic level. While these individual, existing, and more traditional technologies are worthwhile and provide valuable service, they are in a different product category.

16. **Can we connect the output of Workstation Integration to a Video Wall Processor and display the output on a video wall or monitor wall?**
Yes. As a general rule, you can connect the output of the pro-xi chassis to a video wall processor and display the results on a video wall or monitor wall. You would send the output of the video output card (VOC 1) to the video wall controller and then on to the monitors themselves. Depending on the capabilities of the controller, you could split the image over a 2x2 monitor wall or as large as 16x16, or anything in between.

17. **Can the pro-xi technology push video to wall monitors as well as desktop monitors so supervisors and other interested parties can view the controlled systems from a distance?**
Yes. You can install a video splitter on the output side and mirror the two desktop monitors to the two wall monitors.

18. **What additional functionality does the Workstation Integrator provide over Web Browser technology?**
Many new systems present information using HTML. Some control centers are using Web Browser technology to integrate the monitoring and control of multiple systems. While this trend may persist, it does not solve the problems created by the many legacy systems that will continue to exist in most control centers. The Workstation Integrator provides a powerful and useful way to combine both worlds in a single, efficient, operator station.

In many control rooms, the KVM matrix, including the pro-xi unit, are not connected to the internet and "general" company network. Frequently, the KVM network is separate from the general network and thus operators cannot connect using traditional web browser technology.

The Workstation Integrator creates a novel, fundamental, and transformative change in the way humans interact with multiple computers and control systems. The product eclipses existing technology in this regard and expands the operators' paradigm and competencies.

19. **When swapping out one connected computer system with another computer system, do we need to turn off the pro-xi device, which essentially shuts down the control facility during the switch out?**
No. The pro-xi operating system is programmed with hot-swappable functionality. You can swap one control system with another without impacting the pro-xi device as a whole nor any of the other connected computer systems.

20. **Can a pro-xi device control dual-head inputs, and what are the implications?**
Yes. You can connect a dual-head computer system into the pro-xi chassis. Essentially you will utilize two input cards (ISC) with the dual-head cabling.

Once the dual-head system is connected into the pro-xi system, your operators will enjoy additional functionality and control capabilities not available when controlling the dual-head system on the original computer.

21. **When glancing at an integrated monitor, how can the operator instantly determine which incoming system is active?**
The operator can instantly determine, at a glance, which connected system is active by viewing the color of the control bar attached to each system window (either UMD or OMD). Each connected system window displays a control bar, which changes color to indicate active or live status. The default colors are white for viewing, blue for selected, red for controlled. The color scheme can be changed in settings based on the operator's preference.

22. **How many sub-windows can the pro-xi unit create per controlled input?**
You can create one sub-window per connected system.

23. **What is the maximum resolution a pro-xi unit can accommodate?**
The pro-xi system can support any output resolution from 640x480 to 2560x1600, and up to 2048x1536 from incoming computer systems. The pro-xi system recognizes over 140 resolutions.

Maximum output resolution: 2560x1600 @60Hz.
Maximum input resolution: 2048x1536 @60Hz.

24. **When we swap out inputs with different resolutions, what is the process of identifying and connecting to the new, different input resolutions?**
The simple answer is that the pro-xi system automatically senses and adjusts its settings to accommodate a new or different resolution. The operator doesn't need to do anything to accommodate a new connected system. The pro-xi system recognizes over 140 resolutions.

25. **How does the pro-xi system play audio for the various connected systems?**
When the operator selects a particular, connected system, by clicking the system window with the mouse, the audio from that system automatically plays through the speakers.

26. **Does the pro-xi device support USB extenders?**
Yes, you can extend USB signals over a USB extender. But, if you utilize Tx and Rx extenders that accept USB control, you do not need additional USB extenders, you can route control through the Tx and Rx units.

27. **Can more than one operator share control over the inputs connected to a pro-xi chassis?**
Yes, two operators can share control over the incoming computer systems connected to a pro-xi chassis, if the incoming systems are either directly connected to the pro-xi chassis or if they are connected using USB extenders.

If the pro-xi Workstation Integrator is connected to a KVM matrix, then two operators cannot share control over the connected systems; the KVM switch doesn't allow for shared control.

28. **Does the pro-xi interface provide for additional, secure, operator log-in credentials to prevent unauthorized users from accessing classified systems being controlled by the pro-xi device?**
The short answer is 'no.'

User authentication is provided at the organizational level, not at the pro-xi level. Any log-in requirements on the connected computer systems are provided via the organization's standard Active Directory (LDAP) system or other such mechanisms. The pro-xi system itself does not require log-in credentials.

29. **Can an operator "hide" one or more of the connected computer systems to clear up space on the display?**
The short answer is 'yes.'

The pro-xi operator can instantly "hide" any, controlled, computer system(s) on the pro-xi integrated monitor with a simple keystroke. The hidden systems can later be instantly re-displayed with another simple keystroke.

Note that "hiding" a computer system doesn't disconnect or turn off the controlled system, but rather hides the system window from view until recalled later. The hidden, controlled system is still connected but not displayed.

30. **What are the physical dimensions and weight of the pro-xi chassis?**
The physical chassis is a 3RU box; when fully-loaded, the unit weighs 42 pounds (19kg).
(5.25" high x 17" wide x 19.5" deep)
(13.34cm high x 43.18cm wide x 49.53cm deep)

31. **Does the pro-xi unit process SMTP signals?**
No

32. **Does the pro-xi unit support HDCP signals?**
No

33. **Does the pro-xi device allow for remote access; ie: can we log in to the pro-xi chassis remotely, with VLC or Team Viewer, and simultaneously control the multiple, connected computers?**
No

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