

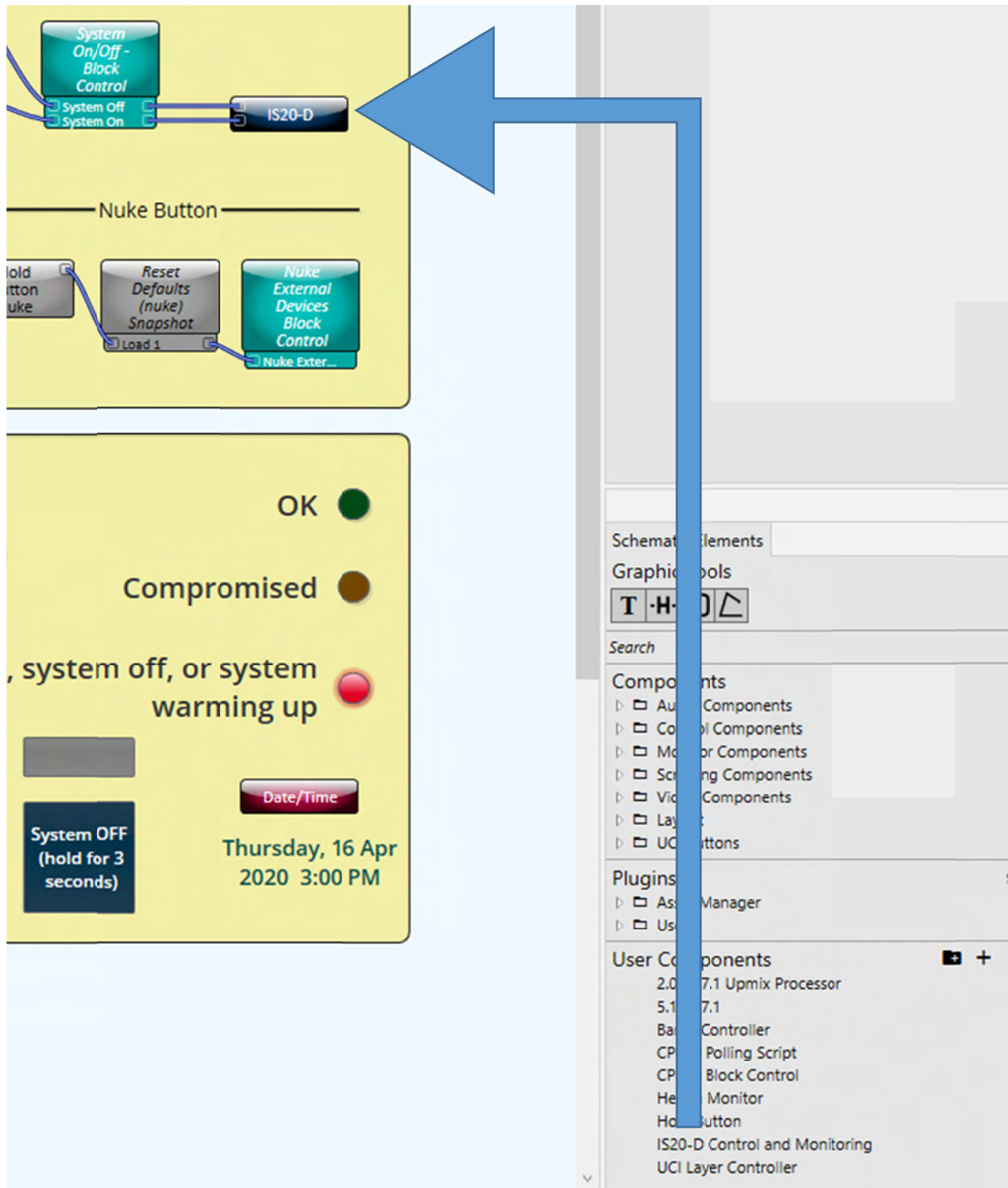
Moving Image Technologies IS20-D Q-Sys Plugin Installation and User Guide

Please Note

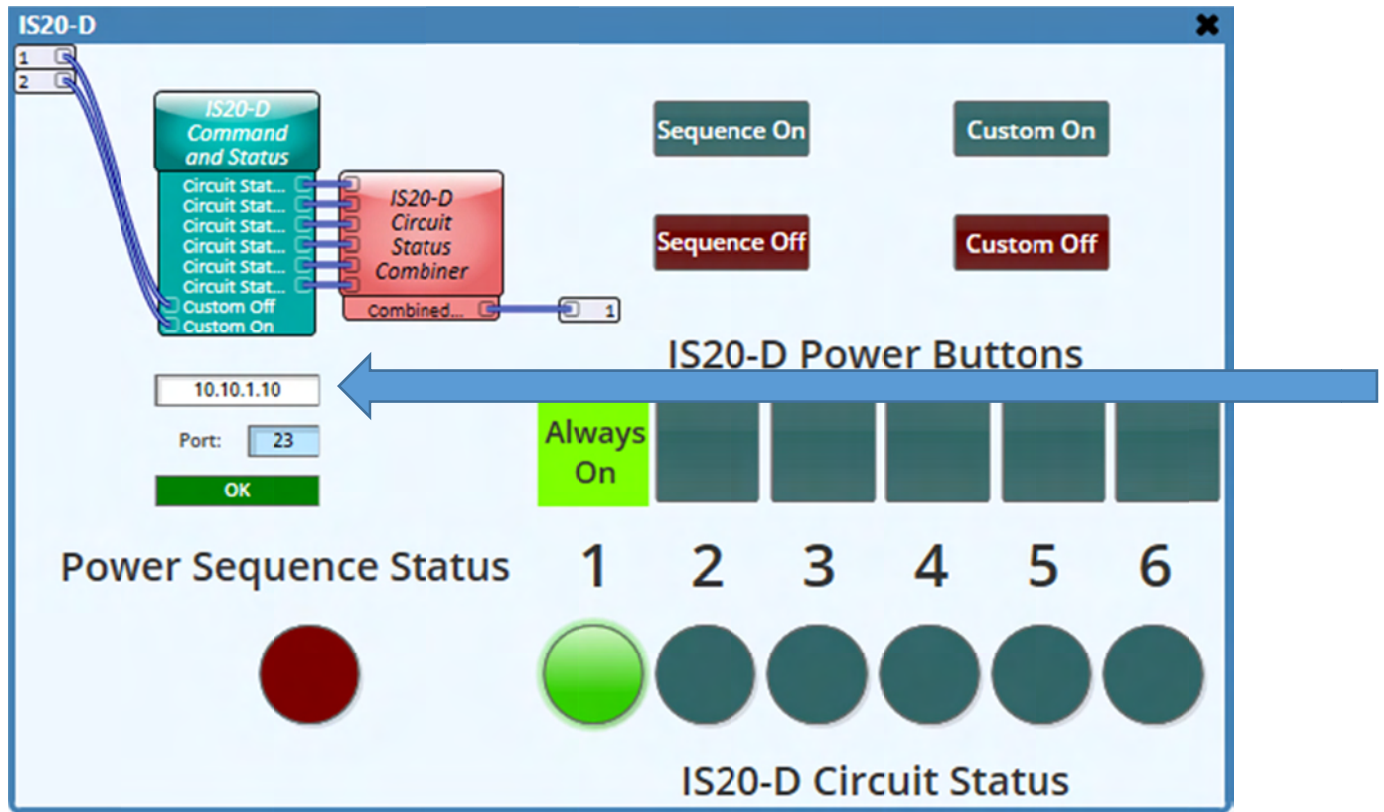
- This plugin was created using Q-Sys Designer, version 8.2.2. It might not work reliably with earlier versions.
- The Q-Sys core on which you install this plugin will need to have a scripting engine license installed, if it was purchased after QSC introduced the licensing requirement.
- This document assumes that the reader is familiar with the basic principles with Q-Sys design, and with configuring the IS20-D power sequencer using its web UI. Please refer to the IS20-D manual that shipped with your unit, if you are unfamiliar with the latter.

Installation

1. Unzip the downloaded package, and copy the `IS20-D Control and Monitoring.quc` file into your Q-Sys user components folder. On A Windows PC, this will usually be `C:\[Your user name]\Documents\QSC\Q-Sys Designer\User Components`.
2. Open Q-Sys Designer, with the design that you intend to use the component with.
3. Double-click on the component in Windows Explorer.
4. Q-Sys Designer will ask for confirmation that you want to install it as a user component. After you have confirmed, it will appear in your list of user components, as so. Once it's there, you can drag it and drop it into the design.



The component that will appear in your design is a container. Once you open it, you will see the block control component that contains the controls and script, a status monitoring combiner, and buttons and indicators for easy operation of the IS20-D.



Establishing Communication

Your IS20-D must be on the same LAN, and be configured with an IP address on the same subnet, as one of the Ethernet interfaces of the Q-Sys core. QSC advises against using a Q-LAN for anything other than audio and video. You should use a separate management LAN, using the core's auxiliary Ethernet interface, for control functions such as this.

Once this is done, you need to enter the IS20-D's IP address into the component. This step must be done either with the design running live on the core, or in emulation mode: it cannot be done when Q-Sys Designer is in disconnected mode.

To connect the Q-Sys core to the IS20-D, simply enter the latter's IP address into the field within the container, as indicated by the arrow in the screenshot above. Press enter, and then the connection status indicator should change from "Disconnected" to "OK" within 3-5 seconds.

Methods of Control

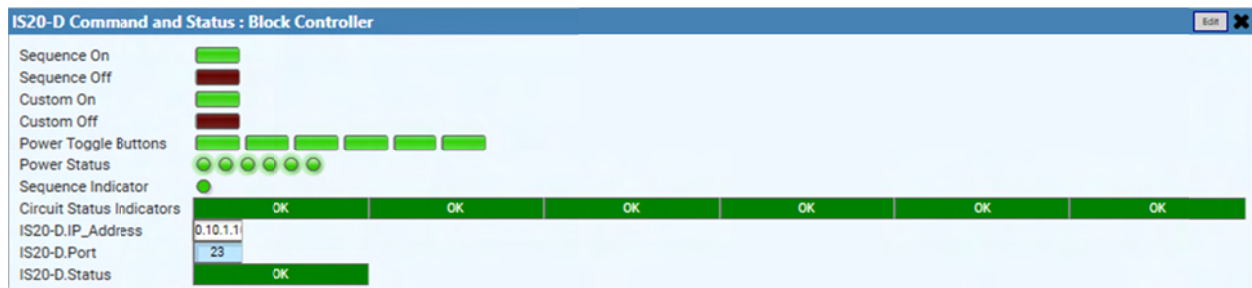
There are two ways that this component can be used to control the IS20-D, and to view the status of each of its six power circuits, from within your Q-Sys design.

- By copying and pasting the buttons and indicators provided into the schematic and/or UCI of your Q-Sys Design. After copying and pasting, you can change their visual characteristics (e.g. their size, or the font and type on the buttons) if you wish.

- By using control routers linked to the input control pins of the block control component. As provided, the outer container has control pins linked to the Custom On and Custom Off buttons. You can change these, or add more control pins to link to some of the other functions, if you wish.

Circuit Status Indicators

Each individual circuit has a status indicator that reports its condition to Q-Sys status monitoring components. These can be seen by opening the block controller component within the container, while the design is live and running on the core, as so:



The outputs from these are routed to a status combiner, with a single status indication for all six circuits exiting the container. The three conditions are:

- Circuit is on, with no fault reported = OK
- Circuit is off, with no fault reported = compromised
- IS20-D reports a fault on the circuit (whether it is supposed to be on or off) = fault

You can edit and reconfigure this status reporting arrangement if you wish, e.g. by routing individual circuit indications outside the container, or linking them to the SNMP component.

Functions

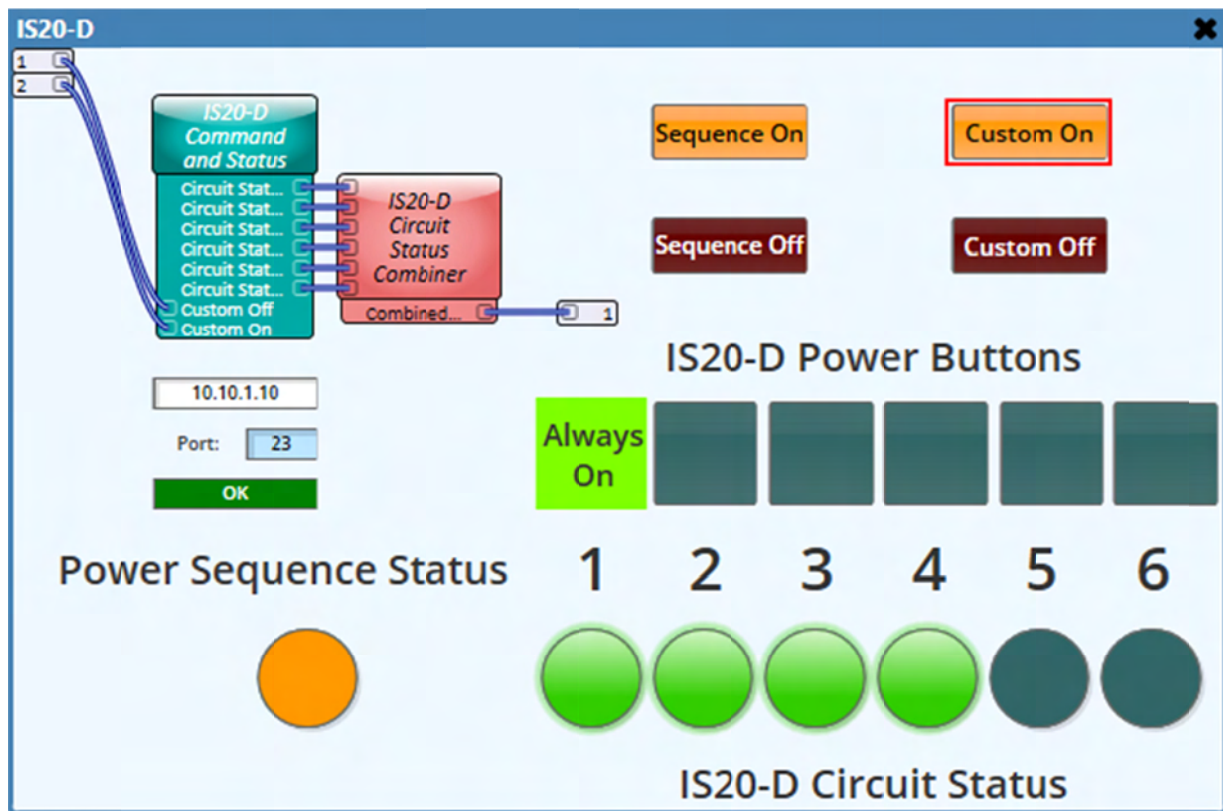
The **Sequence On** and **Sequence Off** buttons turn on or off all the circuits at half-second intervals, apart from those flagged as “exclude from sequence” in the IS20-D’s configuration.

The **Custom On** and **Custom Off** buttons trigger the custom sequence as configured in the IS20-D. These may switch the circuits on or off in a specified order, or with specified time lags between them (e.g. to prevent power surges, or to allow time for devices to boot). Again, circuits that are flagged as “exclude from sequence” are not affected.

The **individual circuit power buttons** toggle that circuit on and off manually. These allow you to operate the circuits individually, and to switch “exclude from sequence” circuits on and off.

The indicators and buttons use the following colors to indicate their state:

- **Dark green** = circuit is off; sequence is completed to off; sequence on or custom is ready to be pushed.
- **Bright green** = circuit is on; sequence is completed to on; sequence on or custom on is complete and active.
- **Amber** = sequence is in progress.
- **Bright red** = circuit is in a fault condition.
- **Dark red** = sequence off or custom off is ready to be pushed.



In this illustration, the power on sequence is in progress.

The “Always On” Circuit

The block script has been written such that circuit 1 is “always on” as defined in the IS20-D’s configuration (in other words, in the setup page of the IS20-D’s web UI, the “exclude from sequence” box is checked for circuit 1). It is anticipated that circuit 1 will be used to power the core, and any other devices that are necessary for control of the system, e.g. a PC, network switch or router, or a PoE injector for a Q-Sys touch panel (if it does not receive PoE from a switch).

If it is used as such, then switching off the power to circuit 1 would cause loss of communication with the system, especially if it is being operated remotely, for example from a PC via Teamviewer. Therefore, the individual power button for circuit 1 is disabled, with the “Always On” label its place, to prevent this circuit from being switched off by accident.

If you do wish to provide a button for circuit 1, you will need to open the block control with Q-Sys Designer in disconnected mode, and copy and paste the button from 1 out of it.

Block Script Modification

The block script makes some assumptions about the power on and power off sequences, because the IS20-D is unable to return the data needed for the script to detect the right answer automatically. These assumptions are as follows:

- Circuit 1 is “always on,” and excluded from the sequence (see above)
- The sequence on and off time is 8 seconds (during which the buttons and sequence status indicators are amber)
- The custom on time is 30 seconds (during which the buttons and sequence status indicators are amber)
- The custom off time is 15 seconds (during which the buttons and sequence status indicators are amber)

You can change these if you wish, by editing the block script. We suggest that you watch QSC’s Block Control training video (<https://training.qsc.com/mod/book/view.php?id=1095>) if you are not familiar with this process.

Please address any requests for support to service@movingimagetech.com.