
RadioRA®



Wireless Home Lighting Control

RadioRA® Chronos™ System Bridge and Timeclock

Design and Compatibility Considerations

Overview

The RadioRA® Chronos™ System Bridge and Timeclock provides a number of useful features in a single, easy-to-set-up device. This document outlines important information to consider when installing, programming, and using the *Chronos*.

System Operation Notes

1. In order to install Chronos™ as the Main Repeater in an existing system, all devices in the system must be returned to their factory defaults prior to installation of *Chronos*.
2. When using a Whole-home Button on a Master Control, there will be a delay between when the Whole-home Button is pressed and when the scene activates. The delay will typically be approximately 2 seconds. This applies for scenes that contain zones of lighting in one system or in both systems. The delay does not apply when the button is activated via RS-232.
3. For Whole-home Buttons that contain lighting in both System 1 and System 2, the scene will activate one system at a time, with a delay in between. The delay is typically 3 seconds. The system that the Master Control is in determines which half of the scene activates first.
4. Only unprogrammed Master Control buttons can be used as Whole-home Buttons. All local programming must be erased from a Master Control button before it can be assigned as a Whole-home Button.
5. When using Cordless Tabletop Master Controls, the Master Control LEDs will not update when the Master Control is first awakened from a “sleep” state.
6. When using Master Controls with Raise/Lower buttons with *Chronos*, the Raise/Lower buttons will not work on Whole-home scenes.

Compatibility Information

Using the *Chronos* with Older RadioRA® Lighting Zone Controls

All Lighting Zone Controls

Raise/Lower functions from Master Controls are not fully supported on Lighting Zone Controls shipped prior to January 1, 2001. The Level Capture feature is also not supported.

Dimmers

On *RadioRA* Dimmers shipped prior to January 1, 2001, the longer *Chronos* fade times are not available. The Legacy setting for fade times must be used.

Switches

On *RadioRA* Switches shipped prior to January 1, 2001, only the First On/First Off (FOFO) setting may be used.

GRAFIK Eye® Interfaces and GRAFIK RA™ Control Units

For GRAFIK Eye® Interfaces and GRAFIK RA™ Control Units shipped prior January 1, 2001, the Legacy setting must be used to get the Control Unit to respond. Note: the *GRAFIK Eye*/*GRAFIK RA* Control Unit will always use its internal fade rate for the *GRAFIK Eye* scene activated.

Using the *Chronos* with Older RadioRA® Master Controls

On Master Controls shipped prior to January 1, 2001, *Chronos* Whole-home scenes will only work with the All On and All Off buttons.

Using the Multi-Function Entry Master Control

The LEDs for the Multi-Function Entry Master Control contact closure inputs cannot be controlled.

The security mode input on the Multi-Function Entry Master Control will not work across systems. If a security system is connected to the Multi-Function Entry Master Control security input, it should be moved to the security input on the *Chronos*.

Using the Switch Closure Interface

The Switch Closure Interface cannot be used to activate Whole-home scenes.

The security mode inputs on the Switch Closure Interface will not work across systems. If a security system is connected to the security inputs on an existing Switch Closure Interface, it should be moved to the security input on the *Chronos*.

Using the Infrared (IR) Interface

On IR Interfaces shipped prior to August 1, 2001, *Chronos* Whole-home scenes will only work with the All On and All Off buttons.

Using the RS-232 Interface

On RS-232 Interfaces shipped prior to August 1, 2001, *Chronos* Whole-home scenes will only work with the All On and All Off buttons.

Security mode activated from an RS-232 Interface will not work across systems. If a third-party system is connected to an existing RS-232 Interface, it should be moved to the RS-232 port on the *Chronos*.

Device Compatibility Chart

Device	Shipped Prior To	Limitations
Dimmers and Switches	January 1, 2001	<ul style="list-style-type: none"> • Must use Legacy fade rate setting. • Must use FOFO setting for Switches. • Raise/Lower not fully supported. • Level Capture not supported.
GRAFIK RA™ and GRAFIK Eye® Interface	February 1, 2001	<ul style="list-style-type: none"> • Must use Legacy fade rate setting to get the <i>GRAFIK Eye/GRAFIK RA</i> Control Unit to respond. Note: the <i>GRAFIK Eye/GRAFIK RA</i> Control Unit will always use its internal programmed fade rate. • Raise/Lower not fully supported. • Level Capture not supported.
Wired Master Controls (Wall-mount and Tabletop)	May 8, 2000	<ul style="list-style-type: none"> • Only the All On/All Off buttons can be used with Whole-home Scenes.
Cordless Master Control	August 1, 2001	<ul style="list-style-type: none"> • Only the All On/All Off buttons can be used with Whole-home Scenes.
Multi-Function Entry Master Control	All	<ul style="list-style-type: none"> • The LEDs on the contact closure inputs cannot be controlled. • Security inputs must be programmed via the MFE and will be local to one system.
Switch Closure Interface	All	<ul style="list-style-type: none"> • None of the inputs (Normal or Security) can be used with Whole-home Scenes. All programming at the SCI will be local to one system.
IR Interface	August 1, 2001	<ul style="list-style-type: none"> • Only the All On/All Off buttons can be used with Whole-home Scenes.
RS-232 Interface	August 1, 2001	<ul style="list-style-type: none"> • Only the All On/All Off buttons can be used with Whole-home Scenes.
Repeaters	January 1, 2001	<ul style="list-style-type: none"> • Level Capture not supported.

System Design Considerations

Determine if Bridging is Required

Bridging is required if:

- More than 32 Lighting Zone Controls exist, or
- More than 12 Master Controls exist

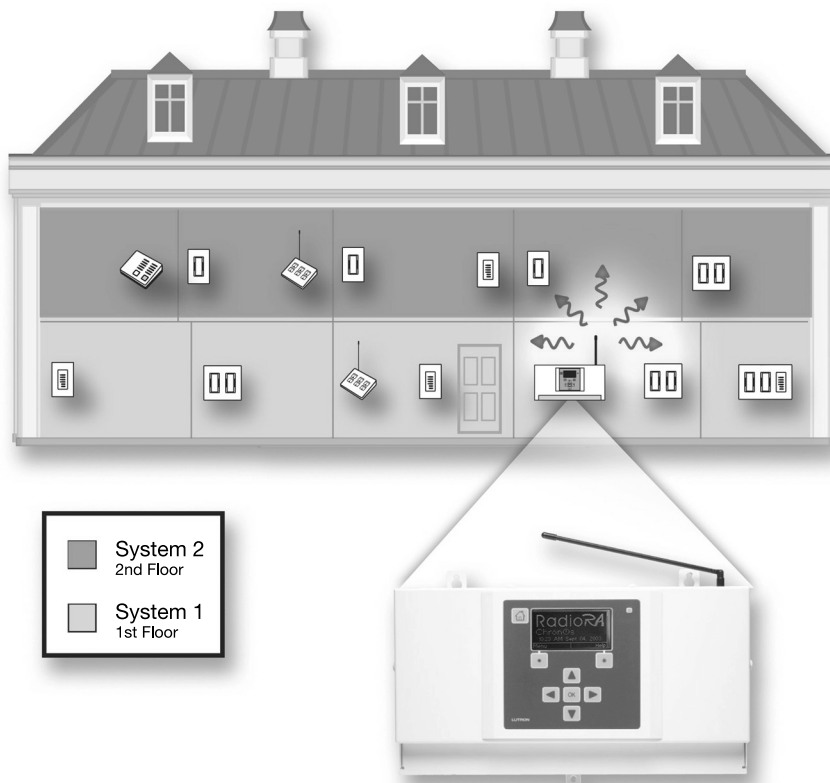
For Bridging Two Systems

For optimal light response time, devices in System 1 and System 2 should not be used in the same room. Splitting the two systems, as shown below, is recommended.

Determine location of System 1 and System 2.

Examples:

- System 1: 1st Floor
System 2: 2nd Floor
- System 1: East Wing
System 2: West Wing
- System 1: Interior
System 2: Exterior



Repeater, Chronos™, Lighting Zone Controls, and Master Control Placement

Place *Chronos* and Repeaters to provide appropriate RF coverage within each system.

Repeaters

- Place System 1 Repeaters within 60 feet (18 m) of each other
- Place System 2 Repeaters within 60 feet (18 m) of each other

Chronos

- Place *Chronos* within 60 feet (18 m) of a Repeater in each system

Lighting Zone Controls and Master Controls

- Place System 1 Controls within 30 feet (9 m) of System 1 Repeaters or *Chronos*
- Place System 2 Controls within 30 feet (9 m) of System 2 Repeaters or *Chronos*

1st Floor View—System 1

