

CS19-URA-003

Universal Remote Annunicator Installation and User Guide



This installation and user guide provides instructions to ensure correct and safe installation and interconnection of the Westell CS19-URA-003 Universal Remote Annunicator (URA).

Westell's CS19-URA-003 URA can operate with any manufacturer's public safety bi-directional amplifier (BDA) and battery backup system. The URA connects to BDA relay outputs to provide visual and audible annunciation at 1 or 2 locations up to 3000 feet away.

The CS19-URA-003 includes:

- a NEMA4 / UL 508A Interface Unit (IU) that mounts next to the BDA
- One or two Remote Annunciators

URA Installation Overview

Figure 1 below depicts a typical URA installation.

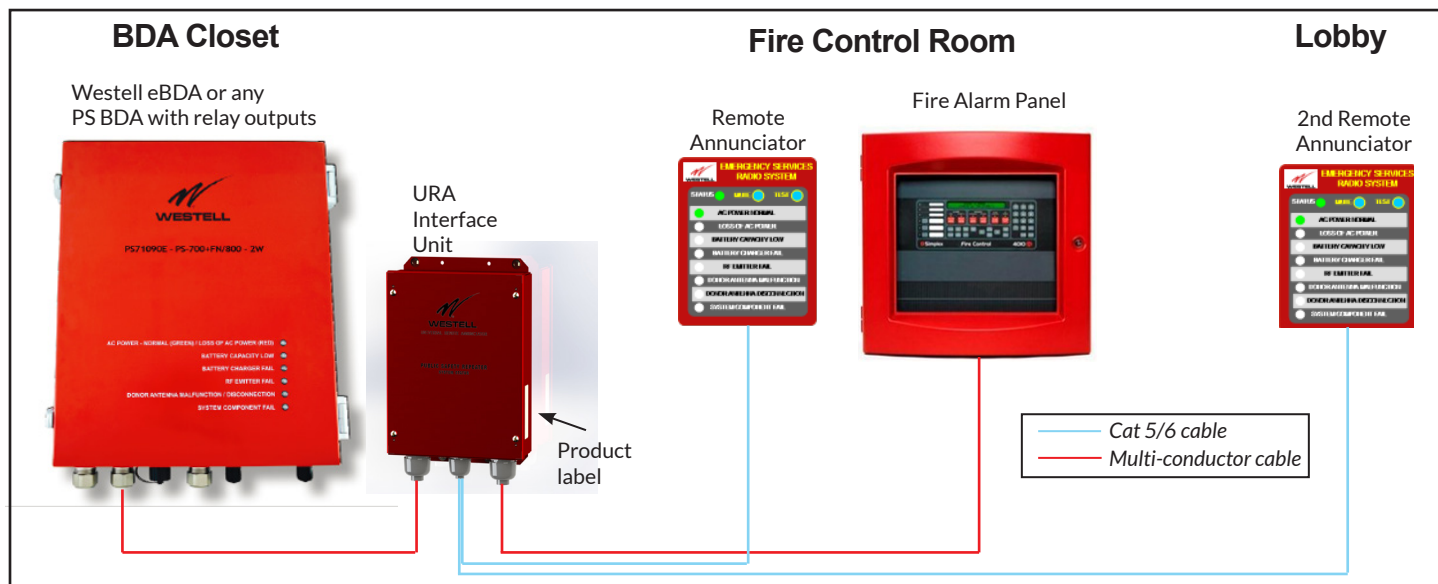


Figure 1. Overview of CS19-URA-003 Universal Remote Annunicator installation

The URA Interface Unit is usually co-located with the Public Safety BBA and its BBU. Multi-conductor cables connect the relays inside the URA Interface Unit to the BDA's relay outputs and the Fire Alarm Control Panel. CAT5 or CAT6 Ethernet cable links the URA interface unit to one or two Remote Annunciators located up to 3000 feet away.

Installation Steps

1. Gather tools and materials.

Tools:

- Drill and drill bits
- Wrenches

- Level
- Screwdrivers
- Wire stripper
- Pliers
- Knife to cut flexible rubber conduit

Materials:

- Flexible rubber conduit
- CAT5 or CAT6 cable for Remote Annunciator connection(s)
- Standard wall-mounted 2-gang electrical junction box (1 for each Remote Annunciator)

2. Mount URA Interface Unit

The URA Interface Unit is wall-mounted using the brackets at top and bottom of the back of the unit. Follow these steps:

- Determine the mounting location. Consider:
 - proximity to the BDA and/or BBC cabinets
 - clearances needed to open cabinet(s) and install conduits
- Lift the Interface Unit to the mounting location and mark each mounting hole. Use a level to ensure level mounting. Remove conduit fittings as needed to access lower mounting holes.
- Drill holes at each mark for wall anchors fitting #8 or

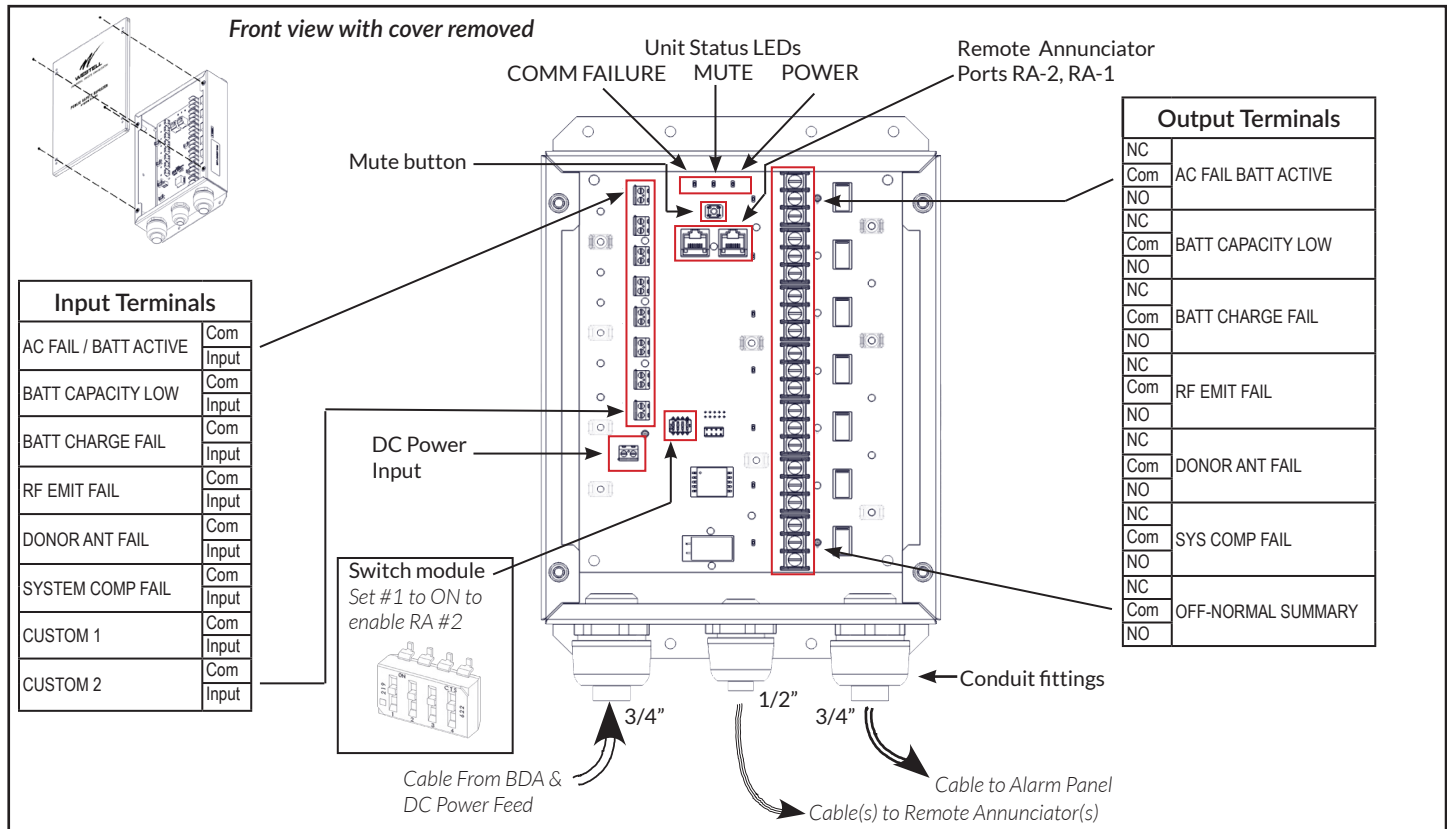


Figure 2. URA Interface Unit Interior Features

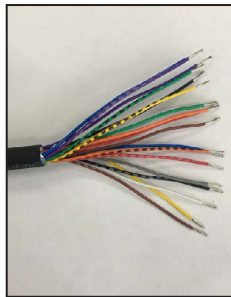
#10 screws, and install anchors in each hole.

- D. Lift the Interface Unit back into place. Starting in the top bracket, secure it with mounting screws in each mounting bracket hole.

3. Connect Alarm Inputs from BDA

Follow these steps:

- A. With a Phillips head screwdriver, remove the four screws securing the URA's front cover and remove the cover.
- B. Use an industry standard multi-conductor alarm cable between 22 and 14 gauge to connect the BDA and battery cabinet (if applicable) to the Unit Interface. Strip the outer cable insulation back to expose the inner conductors, as shown at right.
- C. Strip back the insulation on the ends of each conductor. (Tin wires as needed.)
- D. Route the cable through flexible conduit and into the 3/4" port on the left side of the bottom of the URA interface unit. (See Figure 2)
- E. Use a small slotted screwdriver to connect alarm wire pairs from each BDA output to the matching input terminals on the left side of the URA interface unit circuit



board. Be sure to fasten screws securely.

The URA inputs are normally open, and register closed contacts as alarm conditions.

- F. The CUSTOM 1 and CUSTOM 2 terminals can be used for any devices not corresponding to the other terminals. An off-normal condition at either of these inputs will light the Component Fail indicator.

4. Connect Relay Outputs to Alarm Panel

The URA Interface Unit features form C relays which provide both normally open and normally closed outputs. Follow these steps:

- A. Prepare a multi-conductor cable as in steps 3A and 3B above.
- B. Route the cable through flexible conduit and into the 3/4" port on the right side of the bottom of the URA Interface Unit. See Figure 1.
- C. Use a small slotted screwdriver to connect alarm wire pairs to the output terminals shown on the right in Figure 2 above.
- D. Connect the stripped end of each wire to the matching alarm relay panel contacts.

5. Connect Remote Annunciator Cables

Connect a CAT5 or CAT6 cable long enough to reach the Remote Annunciator fixture in the Fire Control room (or other desired location) to the URA interface unit's RJ45 port labeled RA-1 (see Figure 2). If a second Remote Annunciator will be used, connect a second cable to the RJ45 port labeled RA-2. Route each cable out the 1/2" conduit fitting in the center of the interface unit floor.

6. Connect DC Power

WARNING: Turn off the power feed before connecting wires.

Use a small slotted screwdriver to connect reliably grounded -48 or +24VDC power feed wires to the URA unit interface DC power input on the lower left side of the circuit board. Be careful to observe polarity.



7. Mount Remote Annunciator

Follow these steps for each Remote Annunciator installation:

- A. Install a standard wall-mounted 2-gang electrical junction box at the desired visible location for the remote annunciator.
- B. Install standard CAT5 or CAT6 cable in conduit between the URA interface unit and the junction box.
 - If only a single remote annunciator is being installed, connect to the URA interface unit port RA-1.
 - If a second remote annunciator location is desired, connect the second annunciator to URA interface unit port 2 and enable fault monitoring for port 2 with the RA-2 enable switch. See Section 3: RA-2 Enable Switch in the Remote Annunciator Operation section on Page 4.
- C. To install the annunciator, remove the two screws located on each side of the annunciator to loosen the mounting bracket. Mount the bracket to the front of the junction box.
- D. Connect the cable to the port on the back of the annunciator, as shown at right.
- E. Mount the annunciator to the base and secure it with the two screws removed in step 7C.



8. Power Up the Remote Annunciator

Before power is applied to the newly installed remote annunciator(s), make sure that:

- All preceding installation steps are complete.
- All debris, tools, and installation materials have been moved safely away from components.
- All connections have passed informal field inspection.

To power up the remote annunciator(s), reconnect/turn on the -48 or +24VDC power supply installed in Step 6.

When the power feed is on, the POWER LED at the top of the URA interface unit circuit board will glow green and the AC POWER ON annunciator indicator will glow if the BDA has AC power.

9. Replace Cover

After operation has been fully verified (refer to [all sections in Remote Annunciator Operation below](#)), securely re-install the cover on the Interface Unit with the four Phillips head screws.

Remote Annunciator Operation

1. Unit Status LEDs

Inside the URA interface unit at the top of the circuit board are three Unit Status LEDs labeled COMM FAILURE, MUTE, and POWER.

The COMM FAILURE LED:

- Blinks once (in a recurring pattern) when communications via port RA-1 are lost.
- Blinks twice (recurring) when communications via port RA-2 are lost.
- Remains on when the second remote annunciator is enabled (Switch #1 is set to ON) and communications via ports 1 and 2 are lost.

The MUTE LED:

- Blinks when the mute button has been pushed briefly and the remote annunciator audible alarms are silenced.
- Remains on when the mute button has been held down long enough to permanently mute the annunciators.

The POWER LED:

- Remains on when the URA Interface Unit power is on.
- Blinks quickly when the mute button is pressed and held long enough to permanently mute the remote annunciator(s).

2. The Mute Button

The MUTE BUTTON is near the top center of the URA interface unit circuit board between the Unit Status LEDs and the twin RJ-45 ports. This pushbutton silences the audible alarm in each remote annunciator which sounds whenever there is an alarm condition. The muting behavior is as follows:

- Press the MUTE button briefly to temporarily mute the audible alarm(s) for 24 hours. The MUTE LED will blink and the alarms will remain silenced until:
 - The MUTE button is pressed again,
 - Another alarm condition occurs, or
 - 24 hours pass
- To permanently mute audible alarm(s), press and hold the MUTE button until the POWER LED flashes quickly. In the permanently muted state:
 - the MUTE LED remains on,

- Alarms will remain silenced, and
- A short press of the MUTE button will have no effect
- If the alarms have been permanently muted, repeat the above step to toggle back to the permanently unmuted state:
 - The MUTE LED will not be lit,
 - Audible alarms will sound, and
 - A short press of the MUTE button will mute alarms as described above

3. RA-2 Enable Switch

At lower left center of the URA interface unit circuit board is a switch module with four switches (see Figure 2). The leftmost of these switches is labeled RA 2 Enable. This switch enables or disables monitoring of the communication link RA2. With the switch in the off position RA2 is not operational.

- Set the switch to On to enable RA-2
- Set the switch to Off to disable RA-2.

4. Testing the Remote Annunciators

Check each indicator on each Remote Annunciator while following the testing procedure for your BDA alarms (*refer to your BDA installation and user guide*). The indicator should illuminate and the audible alarm should sound during each alarm condition.

Important Product Information

1. Registration number

A product label with the URA Interface Unit's product registration number and bar code is affixed to the right exterior side of the unit. See Figure 1.

2. Ordering Specifications

Part Number	Description
CS19-URA-003	Universal Remote Annunciator, Interface Unit, and one Remote Annunciator
CS40-ANNUNC	Second remote annunciator for dual RA installations

3. Electrical Specifications

Specification	Description or Value
Operating voltage	24 or 48 VDC
Communications link	Serial data
Maximum distance, UI to RA	3,000 feet (914.4 m)

4. Mechanical Specifications

Technical Specification	Description
<u>Interface Unit</u>	
Weight	6.2 lbs (2.81 Kg)
Dimensions	11.75"H x 8.7"W x 2.6"D 29.84 cm H x 22.1 cm W x 6.6 cm D
Mounting	Wall Mountable
Feedthroughs	2 x 3/4" conduit 1 x 1/2" conduit
Weatherproofing	NEMA Type 4, listed to UL 508A
<u>Connectors</u>	
Alarm Inputs	Compression screw terminals
Alarm Outputs to FACP	Screw terminals
To Remote Annunciator	RJ45 jacks
DC Power Inputs	Compression screw terminals
<u>Remote Annunciator</u>	
Dimensions	6.1"H x 5.1"W x 1.1"D 15.49 cm H x 12.95 cm W x 2.79 cm D
Weight	1.5 lbs.
Mounting	2 Gang Electrical Box or Wall Mount
Weatherproofing	NEMA Type 1
<u>Connectors</u>	
To interface unit	RJ45 jack

Customer Assistance

Complete access including 24x7 technical support for service-affecting outages is available with a Westell Support and Services Agreement.

Pre-Sales Support (9 a.m.-5 p.m. ET Monday-Friday)

1-800-377-8766, option 1

Technical Support (8:30 a.m.-5 p.m. ET Monday-Friday)

1-800-377-8766, option 2 or support@westell.com

When you call, please have:

- Hardware & software versions in use
- Error number and/or exact wording of any screen messages
- What happened, and what you were doing when the issue occurred
- How you tried to solve the issue.

Product information and resources www.westell.com

