

C-TEC
R&D

New XFP Programming Tools (V7.0.8)



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Table of Contents

| | |
|----------------------|---|
| Reasons for testing: | 1 |
| Findings: | 1 |
| Observations: | 1 |

| UUT | Hardware | Firmware |
|------------------|-----------------------|----------------|
| Tools | n/a | V7.0.8 |
| CAST XFP 2LP 32Z | Renesas RPF0999322 R3 | 13A27_24.02.22 |

Table 1 - Versions

Reasons for testing:

New programming tools

Findings:

- Uploading the config to the XFP causes the sounders not to activate. *I don't know how to test this.*
- XFP doesn't update to the correct time when the config is sent. A random date and time are given it seems. *Fixed.*
- I/O's cannot be named. *They can ...or I have misunderstood what is meant here.*
- Under CAST HS2 device settings the sounder is reported as an input while fire 2 is an output. *Fixed.*
- Under CAST HS2 device settings, sub address Fire 1 & 3 are both unavailable. Fire 1 is available on the legacy tools. *Fixed.*
- Under all I/O's the channel is set to 2 by default instead of 1 compared to the legacy tools. *Fixed.*
- If user downloads the latest system from the XFP when the current config open isn't the latest then the device maps won't update unless you go to "device details" tab first. *I'm not sure what this means.*
- If a 1 loop config is open and the user opens a 2 loop config then the software still thinks it only has 1 loop. *Fixed.*
- If devices are removed on the config and sent over to the XFP, the changes aren't updated on the XFP. *Fixed.*

Observations:

- Device name limits have been increased from 22 to 24 characters. *The limit appears to be 24 in the old tool. Which should it be?*
- Can't double tap empty slot to assign a device unlike old tools. *This is by design, to prevent identical changes that can happen with the old tool. E.g. change/deletion of devices by misplaced mouse clicks. Or, most bizarrely, when attempting to use the mouse wheel to scroll a pane, it instead replicates the last change all the way down a column (it doesn't scroll the panel either).*

- Sometime data validation reports site config hasn't been entered but sometimes it doesn't report. *The warning for blank Site Config client / installer details is only shown before saving to file. These are not checked elsewhere because they are not sent to the panel.*

Below are screenshots to visually show the data that has been transferred correctly between the legacy tools and the new tools. The config was sent to the XFP by the old tools and then downloaded from the XFP with the new tools to simulate what the customers would do when using new tools on systems that have been created the legacy tools.

System Name: XFP **Panel:** 1

☐ Allow modifications

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Zones

Input delay: 04:00 mins Investigation period: 02:00 mins

| # | Description | Output delays (mins) | | | | Functioning with | Multiple Alarms End Delays | Day Dependencies | | Night Dependencies | |
|----|----------------|----------------------|---------|---------|---------|------------------|----------------------------|------------------|-------|--------------------|--------|
| | | Sounders | Relay 1 | Relay 2 | Outputs | | | Option Detector | Alarm | Option Detector | Alarm |
| 1 | Reception | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 2 | Zone 2 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 3 | Zone 3 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 4 | Zone 4 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 5 | Main Office | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 6 | Zone 6 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 7 | Zone 7 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 8 | Delay | 2:00 | 0:30 | 1:00 | 1:30 | ✓ | ✓ | Normal | - | Normal | - |
| 9 | Zone 9 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 10 | Kitchen Dep A | 2:00 | 0:30 | 1:00 | 1:30 | ✓ | ✓ | A | 1:00 | 5:00 | Normal |
| 11 | Zone 11 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 12 | Lab | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 13 | Zone 13 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 14 | Zone 14 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 15 | Workshop Dep B | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | B | - | 5:00 | Normal |
| 16 | Shed | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 17 | Zone 17 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 18 | Zone 18 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 19 | Zone 19 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 20 | Zone 20 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |
| 21 | Zone 21 | 0:00 | 0:00 | 0:00 | 0:00 | ✓ | | Normal | - | Normal | - |

Select a zone or panel to show details

This was not replicated when transferring to/from the panel but it did do this when reading from a config file. Fixed.

XFP
Programming Tools
Version 7.0.2

System Name: XFP Panel: 1

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☐ Allow modifications

Groups

Panel sounder 1 belongs to Sounder Group 3
Panel sounder 2 belongs to Sounder Group 4

Evac tone: Tone/Message M3
Alert tone: Tone/Message M4

☒ New fire causes re-sound
Phased delay: 03:00 min

Set selected items:

Off Alert Evac Set all to Off Set all to Alert Set all to Evac

Triggers Sounder Groups

| Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 Reception | | | | | | | | | | | | | | | | |
| 2 Zone 2 | | | | | | | | | | | | | | | | |
| 3 Zone 3 | | | | | | | | | | | | | | | | |
| 4 Zone 4 | | | | | | | | | | | | | | | | |
| 5 Main Office | | | | | | | | | | | | | | | | |
| 6 Zone 6 | | | | | | | | | | | | | | | | |
| 7 Zone 7 | | | | | | | | | | | | | | | | |
| 8 Delay | | | | | | | | | | | | | | | | |
| 9 Zone 9 | | | | | | | | | | | | | | | | |
| 10 Kitchen Dep A | | | | | | | | | | | | | | | | |
| 11 Zone 11 | | | | | | | | | | | | | | | | |
| 12 Lab | | | | | | | | | | | | | | | | |
| 13 Zone 13 | | | | | | | | | | | | | | | | |
| 14 Zone 14 | | | | | | | | | | | | | | | | |
| 15 Workshop Dep B | | | | | | | | | | | | | | | | |
| 16 Shed | | | | | | | | | | | | | | | | |
| 17 Zone 17 | | | | | | | | | | | | | | | | |

Panel Status: Protocol: CAST

XFP
Programming Tools
Version 7.0.2

System Name: XFP Panel: 1

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Sets

Set selected items:

Not triggered Pulsed Continuous Delayed 02:00 min Clear All

Should be 5 mins.

Output Set Triggered

| Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1 Reception | | | | | | | | | | | | | | | | | | | | |
| 2 Zone 2 | | | | | | | | | | | | | | | | | | | | |
| 3 Zone 3 | | | | | | | | | | | | | | | | | | | | |
| 4 Zone 4 | | | | | | | | | | | | | | | | | | | | |
| 5 Main Office | | | | | | | | | | | | | | | | | | | | |
| 6 Zone 6 | | | | | | | | | | | | | | | | | | | | |
| 7 Zone 7 | | | | | | | | | | | | | | | | | | | | |
| 8 Delay | | | | | | | | | | | | | | | | | | | | |
| 9 Zone 9 | | | | | | | | | | | | | | | | | | | | |
| 10 Kitchen Dep A | | | | | | | | | | | | | | | | | | | | |
| 11 Zone 11 | | | | | | | | | | | | | | | | | | | | |
| 12 Lab | | | | | | | | | | | | | | | | | | | | |
| 13 Zone 13 | | | | | | | | | | | | | | | | | | | | |
| 14 Zone 14 | | | | | | | | | | | | | | | | | | | | |
| 15 Workshop Dep B | | | | | | | | | | | | | | | | | | | | |
| 16 Shed | | | | | | | | | | | | | | | | | | | | |
| 17 Zone 17 | | | | | | | | | | | | | | | | | | | | |
| 18 Zone 18 | | | | | | | | | | | | | | | | | | | | |
| 19 Zone 19 | | | | | | | | | | | | | | | | | | | | |
| 20 Zone 20 | | | | | | | | | | | | | | | | | | | | |

Panel Relay Triggered: 1 2

Is set silenceable?

Panel Status: Protocol: CAST

Values can be set between 0:00 – 10:00 as per the old tools. However, the old tool always saves this value as 5:00 in a config file, irrespective of what it shows on the screen.

System Name **XFP** Panel **1**

☐ Allow modifications

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Site Configuration

System Name **XFP** Panel Location Firmware Version **13A27**

Client Name Installer Name
 Client Address Installer Address
 Postcode Tel Postcode Tel
 Installed Select a date **15** Engineer Name
 Commissioned Select a date **15**

Normal string **C-TEC CAST-XFP Fire Panel**
 Maintenance string **Service required - call engineer**
 Maintenance date **01/01/2099** **15** ☐ Send to Panel?

Occupied (Day) begins at **07:30** M T W T F S S ☒ ☒ ☒ ☒ ☒ ☒ ☒
 Unoccupied (Night) starts at **12:00** ☒ ☒ ☒ ☒ ☒ ☒ ☒

08/01/2024 14:13:33
☒ Send to Panel?
☒ Auto adjust DST?

Access level 2 code (AL2) **3333**
 Access level 3 code (AL3) **4444**

☐ Real time output of events
☒ Blink polling LED

The client and installer fields are not stored on the panel, only in config files.

XFP Programming Tools Version 7.2.8

System Name **XFP** Panel **1**

☐ Allow modifications

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Causes and Effects

Timer Event Times

| Event | T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| Occurs at | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Event | T9 | T10 | T11 | T12 | T13 | T14 | T15 | T16 |
| Occurs at | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |

Action Occurs when... Resets when...

| | | | | | | | |
|-----------------|------------|-------------|---------|---------|-------------|---------|----------|
| 1 Sounder evac | All Groups | Panel Input | Input 1 | is True | Panel Input | Input 1 | is False |
| 2 Sounder alert | All Groups | Panel Input | Input 2 | is True | Panel Input | Input 2 | is False |
| 3 None | | | | | | | |
| 4 None | | | | | | | |
| 5 None | | | | | | | |
| 6 None | | | | | | | |
| 7 None | | | | | | | |
| 8 None | | | | | | | |
| 9 None | | | | | | | |
| 10 None | | | | | | | |
| 11 None | | | | | | | |
| 12 None | | | | | | | |
| 13 None | | | | | | | |
| 14 None | | | | | | | |
| 15 None | | | | | | | |
| 16 None | | | | | | | |

Panel Status: Protocol: **CAST**

*Screenshot is old.
 All set to 04:00 00:00 on old tools
 but new tools report as 04:39.
 Max new tools allow is 04:39.
 Is this correct?*

“Occurs at” strongly implies that a time of day is meant, not a length of time. I assumed that allowing 99:99 to be input was one of the old tool’s quirks. When the new tool receives 99:99 from the panel it interprets it as 4 days, 4 hours & 39 minutes, giving a resultant time of day of 04:39.

Ant has confirmed that event times are times of day so I will leave the new tool as-is, apart from validating an incoming value and setting it to 0:00 if greater than 23:59.

Note that sometimes sending/receiving 99:99 in the old tool results in a seemingly unrelated value. I also observed that when setting only the 2nd time to 99:99, after a send & receive the 1st time was also set to 99:99.