



## Release Notes

### ARC Solo firmware version 1.0.58

#### Scope

This document describes the changes in ARC Solo firmware through version 1.0.58.

#### *Changes from firmware version 1.0.56 to version 1.0.58*

##### New Features and Enhancements

**The ARC Solo now supports Burk digital temperature sensors:**

STM-4D is a new optional software license key that enables the sensor port on the back of the ARC Solo. This allows users to connect up to 4 Burk digital temperature sensors directly to the ARC Solo either through the supplied 4 port splitter or through daisy chaining.

More information can be found here: [STM-4D Manual Rev A](#).

#### *Changes from firmware version 1.0.47 to version 1.0.56*

##### New Features and Enhancements

**Warp engine connections can now detect configuration changes:**

Warp engine connections to the ARC Solo can now detect and download configuration changes to AutoPilot or Arcadia.

**The date and time of the last configuration change are now available via SNMP:**

The ARC Solo SNMP interface now includes an OID that returns the date and time of the most recent configuration change.

**Arcadia authorization codes can now be entered manually from the ARC Solo web page:**

Arcadia authorization code entry is now supported on the ARC Solo **System > Basic Settings** web page.

**The number of user accounts has been increased:**

Up to 20 user accounts can now be created on each ARC Solo system.

##### Resolved Issues

**Header text on the Jet Speech page has been updated:**

The column header labels on the **System > Jet Speech** web page have been updated for clarity.

**NTP server settings are now updated before synchronizing the time:**

The “update now” command on the **System > Time** web page now saves the server settings to the ARC Solo before attempting to synchronize the time.

**The RSI now reads the meter label when reporting alarms:**

The Recordable Speech Interface now speaks the meter label instead of the value when dialing out to report an alarm.

**Clear alarm functions have been removed for users with observer access:**

The ability to clear alarms is no longer included on the **Alarms** web page when it is displayed to observer-level users. This capability is not valid for users with observer access.

**Arcadia authorization codes now load consistently:**

Authorization codes for Arcadia web and Arcadia NOC now load properly when entered via the Arcadia Server.

## *Changes from firmware version 1.0.46 to version 1.0.47*

### *Resolved Issues*

**Extended DTMF tone length on RSI module:**

The length of DTMF tone on the Recordable Speech Interface module has been extended to 200ms on / 200ms off.

## *Changes from firmware version 1.0.38 to version 1.0.46*

### *New Features and Enhancements*

**Warp Engine™ connections now track uncleared alarms:**

An uncleared alarm count allows users to see the number of uncleared alarms for a site.

**Added support for Arcadia:**

ARC Solo now works with Burk Arcadia Cloud Service.

**Warp Engine connections now support commands:**

The Warp Engine protocol now allows for commands to be issued in AutoPilot without requiring a full connection.

### *Resolved Issues*

**Jet Active Flowcharts can now be scheduled for longer intervals:**

Flowcharts in ARC Solo can now be scheduled to run at any interval.

## *Changes from firmware version 1.0.37 to version 1.0.38*

### *Resolved Issues*

**Status channel setup page now includes column headings for on and off colors:**

The status page now clearly defines all the options for setting up a status channel.

**A master reset no longer clears the AutoPilot® authorization code field:**

When a master reset is performed, the AutoPilot® authorization code does not get erased from the system.

## *Changes from firmware version 1.0.36 to version 1.0.37*

## Resolved Issues

**The Status Alarms page Phone List selection box is now available:**

Users can now select a phone list to dial-out on status alarms.

## Changes from firmware version 1.0.35 to version 1.0.36

### Resolved Issues

#### **Muted channels no longer generate alarms:**

Muting a channel now prevents that channel from generating alarms.

## Changes from firmware version 1.0.31 to version 1.0.35

### New Features and Enhancements

#### **Warp Engine™ now reports only active alarms:**

Warp Engine polling now returns active alarms rather than uncleared alarms.

#### **A Hyperlink to the ARC Solo manual is now available in the web interface:**

The ARC Solo manual is now available via a hyperlink on the ARC Solo web interface *System Information* page, providing users immediate access to product technical information.

#### **A Rearm Delay setting has been added for meter and status channel alarms:**

ARC Solo now provides a user configurable Rearm Delay setting for each meter and status channel. After reporting an alarm for a particular channel, the system waits for the duration of the Rearm Delay before allowing another alarm to be reported for that channel. The Rearm Delay setting can be found on the *Meter Alarms* and *Status Alarms* pages in the web interface.

#### **PASV FTP protocol is now supported:**

Passive mode FTP is now used for file transfer, allowing users to update firmware without the need to change firewall settings for access to the unit.

**Note: Burk Firmware Loader version 1.0.9 or later is required for this new feature.**

#### **Default speech labels have been added to the Recordable Speech Interface:**

ARC Solo factory default settings now include the RSI default greeting “Hello”, default welcome message “Thank You”, default goodbye message “Goodbye” and default rejection message “Error”.

#### **ARC Solo no longer allows the word “password” to be configured as a user password:**

As an increased security measure, ARC Solo now rejects attempts to set a user password to the word “password” in any combination of upper or lower case.

### Resolved Issues

#### **Status settings are now organized in two web pages, *Status* and *Status Alarms*:**

The addition of a new *Status Alarms* web page enables a clearer presentation of Status settings and ensures that all data fields are displayed within the page boundaries of all major web browsers.

#### **The user login process has been optimized:**

Logins are now processed sequentially, ensuring completion of each login request.

#### **Username entry is now case insensitive:**

During user login, ARC Solo usernames can now be entered in any combination of upper and lower case.

#### **Attempts to include the underscore character in NetBIOS hostnames are now rejected:**

The underscore character is no longer accepted in the NetBIOS/Hostname field on the *Networking* web page, enhancing compatibility with major web browsers.

**Mobile devices are now automatically redirected to the mobile web page:**

Small-format mobile devices accessing the ARC Solo web interface are now automatically redirected to the mobile web page.

**The login screen for the ARC Solo mobile web interface now loads properly:**

The ARC Solo mobile web page now initiates properly, serving the proper web login screen.

## *Changes from firmware version 1.0.30 to version 1.0.31*

### *New Features and Enhancements*

**Special Power meter type is now enhanced for use with GatesAir Maxiva ULXT20 telemetry output:**

The meter type “Special Power” now applies a correction equation for display of the forward power telemetry output from a GatesAir Maxiva ULXT20 transmitter.

### *Resolved Issues*

**Leap year duration is now calculated correctly:**

Leap year duration is now accounted for correctly ensuring that date calculations are correct after the leap year ends.

## *Changes from firmware version 1.0.29 to version 1.0.30*

### *Resolved Issues*

**The “Clear all alarms” link on the Alarms page of the web interface now operates correctly regardless of the number of active alarms in the log:**

All active alarms can now be cleared using the “Clear all alarms” link without the potential for alarm log corruption. Upgrading to ARC Solo firmware 1.0.30 is recommended to avoid inadvertent corruption of alarm log files.

## *Changes from firmware version 1.0.27 to version 1.0.29*

### *New Features and Enhancements*

**Warp Engine™ polling using AutoPilot® software is now supported:**

Warp Engine polling enables fast, bandwidth efficient, real-time monitoring of hundreds of ARCS Plus or ARC Solo sites at a rate of 100 sites per second, with each site reporting as many as 32 status and/or meter values. Warp Engine polling is highly efficient, requiring less than 400 bytes per second of IP capacity for each monitored site. If communications bandwidth is at a premium cost, it can be further reduced by selection of a slower polling rate. AutoPilot version 2.10.50 or greater must be used in conjunction with this release.

## *Changes from firmware version 1.0.22 to version 1.0.27*

### *New Features and Enhancements*

**Custom speech files can now be updated remotely via the web interface:**

Individual custom phrases can now be added and deleted directly from the ARC Solo web interface. In addition, it is now possible to download the complete custom speech vocabulary from the ARC Solo to your PC for offline editing, and to upload the entire custom or standard vocabulary directly from your PC to the ARC Solo. This

feature makes it possible to create or modify entire custom vocabularies at your desk or in a studio setting, then to deploy the new vocabulary to ARC Solo systems throughout your network. Physical access to the ARC Solo unit is not required during the upload process. AutoLoad Plus version 3.1.83 or greater must be used in conjunction with this release.

**ARC Solo can now be configured to send SNMP trap messages:**

ARC Solo can now be configured to issue SNMP Trap messages based on user-selected alarm types for user-specified meter channels and status channels. Up to four SNMP managers can be specified for receipt of the Trap messages.

**ARC Solo will now respond to an SNMP Get-Request for System Description:**

If SNMP is enabled and the correct Read Community String is provided, ARC Solo will now respond to an SNMP Get-Request for System Description (SysDescr). The response includes a character string made up of the unit's user-assigned location name and the text label "-ARC Solo".

**The Upload process now verifies compatibility of firmware and web page revisions:**

When uploading new firmware and/or web page files, ARC Solo now confirms compatibility of the files and prompts the user to upload an appropriate replacement file if incompatibility is detected.

**User passcodes can now be entered on the RSI phone interface without a terminating:**

Users can now log on to the Recordable Speech Interface with simple entry of the numeric passcode. It is no longer necessary to enter the # key at the end of the passcode.

## Resolved Issues

**The Daylight Savings Time offset is now correctly applied on transitions into and out of the DST period:**

When Daylight Savings Time is enabled, ARC Solo now correctly calculates and applies the DST start and end dates, ensuring that the correct time is displayed on the web interface and is used for execution of calendar events and automated functions.

**ARC Solo now accepts only letters, numbers or hyphens in NetBIOS/Hostname entries:**

To improve operation with Internet Explorer, ARC Solo now accepts only letters, numbers or hyphens when a NetBIOS/Hostname is entered by the user. This issue has no effect on operation with Firefox or Chrome browsers which do not exhibit this character sensitivity.

**Web interface controls for clearing alarms are now hidden from observer-level users:**

The Web interface controls to clear individual alarms and to clear all alarms are now hidden from observer-level users. These controls, while never active for this level of user, in the past gave the false impression that observers could clear alarms.

**Command buttons in the web interface are now grayed out for observer-level users:**

Command buttons on the web interface now appear grayed-out to users with observer-level status. These controls, while never active for this level of user, in the past gave the false impression that observers could activate commands.

**Audio monitoring via the Recordable Speech Interface (RSI) now times out after 30 seconds:**

Telephone line monitoring of the audio signal applied to the rear panel "Audio In" jack now times out 30 seconds after the last user entry of RSI command 994.

**A minimum command duration of 100 mS is now enforced:**

The user-configurable command duration now has a minimum value of 100 milliseconds to ensure consistent relay actuations.

## *Changes from firmware version 1.0.17 to version 1.0.22*

### *New Features and Enhancements*

**ARC Solo users can now take advantage of the Burk Email Cloud Service:**

The Cloud Service works in conjunction with your ARC Solo system to originate encrypted emails using the STARTTLS protocol extension. If your current email server does not support STARTTLS, you can open a free email account with an Internet email service provider. The Burk email cloud service is compatible with email services from a wide range of providers such as Gmail, mail.com, GMX and Zoho.

### *Resolved Issues*

**Jet email templates are now properly restored when loading a saved configuration:**

A previously saved configuration can be loaded to the ARC Solo using the Restore Configuration action on the web interface. This action now includes restoration of the Jet email templates that were in place at the time the configuration was saved.

## *Changes from firmware version 1.0.13 to version 1.0.17*

### *New Features and Enhancements*

**Automatic syntax checking now prevents invalid parameter entry in email templates:**

The ARC Solo email template editor now performs real-time validation of template tokens as they are entered by the user. Tokens identify the specific data elements to be included in each email message. A misspelled token or an out-of-range channel ID for a token is identified to the user as it is typed and cannot be saved until it is entered correctly. Tokens are now case-insensitive and can be entered in any combination of lower and upper case characters.

**The ARC Solo now supports backward-compatibility for restoration of configuration files:**

Beginning with firmware release 1.0.1.16, The ARC Solo will accept and properly load configuration files created on later versions of ARC Solo firmware. Only settings applicable to the currently operating firmware version will be loaded.

### *Resolved Issues*

**Web login authentication is now compatible with Firefox browser:**

When attempting to log on to the ARC Solo web interface with invalid login credentials, the user can now exit the authentication process without terminating the Firefox application.

**Boot-time file verification now prevents loading a corrupt configuration file:**

During its start-up process the ARC Solo now performs a file integrity check to prevent loading a corrupt configuration file. If a corrupt file is detected, default configuration values are applied.

**All latching relays states are now properly restored after power cycling the ARC Solo:**

Following a power interruption to the ARC Solo, all relays configured for latching mode are returned to the states they held prior to the power loss, regardless of the sequence of raise and lower commands executed prior to loss of system power.

## Changes from firmware version 1.0.7 to version 1.0.13

### New Features and Enhancements

#### **DHCP is now the factory default:**

DHCP is enabled with the default hostname ARCSOLO when the unit is shipped from the factory, and is re-enabled any time a FACTORY DEFAULT action is initiated or the MASTER INIT button on the rear panel is depressed. A blank hostname cannot be saved if DHCP is enabled.

#### **Selectable filtering is now available on all meter channels:**

A filter can now be enabled for each meter channel, selectable as None, Light, Medium or Heavy. The selection is available on the System>Meter Calibration page of the web interface. This feature can be used to smooth short-term variations on incoming signals. A setting of *None* disables smoothing for that channel.

#### **Simplified firmware upload procedure now available:**

The Burk Firmware Loader is now available for upload of new firmware versions to the ARC Solo. The loader can be downloaded at [www.burk.com/downloads](http://www.burk.com/downloads).

#### **Maintenance Mode security enhanced:**

The *Reboot* and *Factory Default* actions in the System>Advanced webpage are now blocked when the ARC Plus unit is in Maintenance Mode. Note: Maintenance Mode is enabled by depressing the Remote button on the front panel of the unit.

#### **Email encryption level increased:**

ARC Solo now provides a 2048-bit SSL security certificate, ensuring compatibility with heightened security requirements on Gmail and other email servers.

### Resolved Issues

#### **Relay states now restored after power cycle:**

If AC power is removed then re-applied to the ARC Solo during normal system operation, relays are now restored to the ON/OFF states that were in effect before removal of power. If AC power is removed from the ARC Solo while in Maintenance Mode, the relay states are not restored after power is reapplied to the unit. In this case, relays previously in the ON state will be set to OFF when the unit exits Maintenance Mode.

#### **Mobile web page now adheres to Command button *Hide* selections:**

The Mobile webpage now displays or hides Command buttons based on user-selections made using the *Hide* check boxes on the System>Commands webpage.

#### **Times displayed are now consistent on the System>Time web page:**

The time displayed at the top left of the System>Time web page updates dynamically while the page is viewed. The time displayed at the top right of the System>Time web page now updates to the correct time whenever the web page is refreshed.

#### **Dial-out pause time has been increased:**

A comma entered in a dialing string will now generate a 2 second pause. In previous versions a comma in the dialing string resulted in a pause of 0.2 seconds.