Pray Times Plugin

For QSC Q-Sys

Version 1.0

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Revision History

Date	Version	Comments
6-10-22	1.0	Initial Release

Introduction

This is a reference manual to describe the interface provided for the Pray Time plugin for the QSC Q-Sys system**.**

Overview

The is designed to calculate prayer times for your city based on calculation parameters and settings set in the plugin, the plugin calculate pray times and trigger any notification set in the overall system design, which can be muting the audio system, playing Athan audio files, etc.

The Plugin is calculating pray times locally on the processor without any connection to the internet, that's why the plugin needs some parameters to be set properly in order for the plugin to get the correct pray times in the target city/location, the following parameters are required for the target city/location:

- Location Coordinates (Latitude & Longitude) of the city
- Calculation method used in city
- Juristic (Asr) method used in city
- High Latitude method used in city
- Time format to be used to show times on layout/UCI
- Minutes adjustment for each pray to match the local pray times

If these are not provided properly the plugin will not calculate pray times properly, all these parameters should be set for the target city after loading the program to the Core processor

To get the correct parameters that are suitable for your city, please visit https://ultcontrol.com/modules/pray-times/

It is important to set the processor date, time, and time zone to the correct local data before loading the program to the processor, if these are not set correctly, the calculated times and times notification will not be done properly.

Because pray times changes daily, the plugin is already programmed to re-calculate the pray times at midnight to get the new day times

This plugin is Core processor licensed, meaning that the plugin will not work in full if it is not licensed to the target Core processor, in this case the plugin will indicate that on the status indication on the layout, and it will show only the first 3 times if it is not licensed properly, but in case of emulation, the plugin will show and notify for all times for only 1 day. In order to license it you will need a License key and Activation key which can be acquired by visiting https://ultcontrol.com/modules/pray-times/

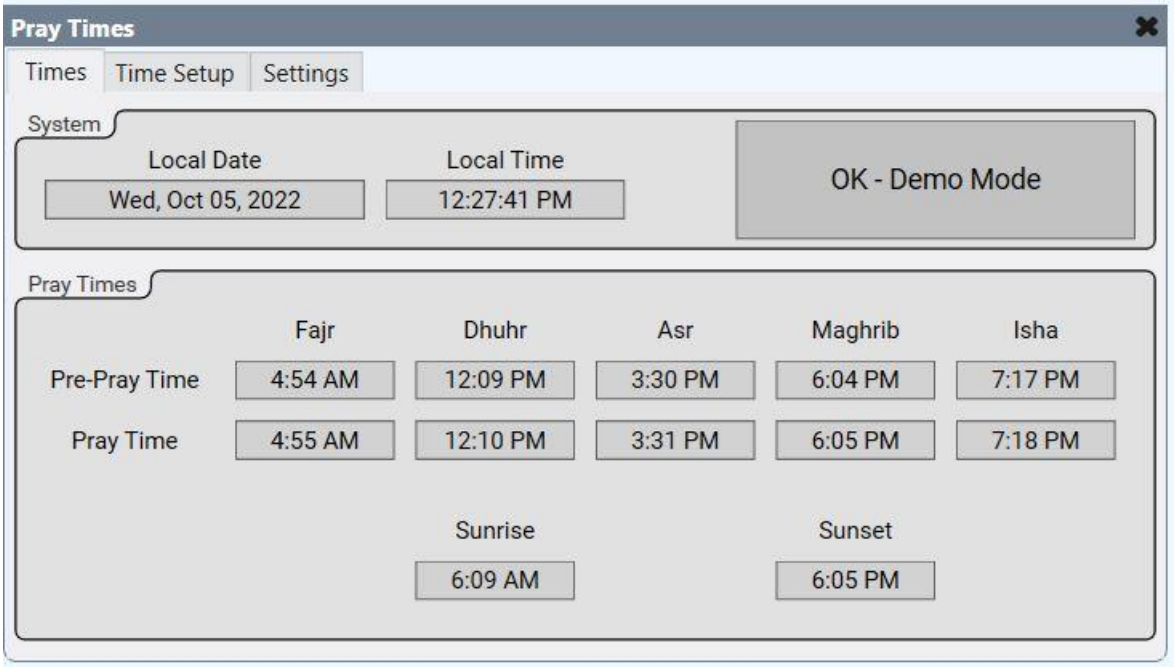
Properties

License Key: To set the license key for the target Core processor to activate the plugin
Activation Key: To set the activation key for the target Core processor to activate the plugin

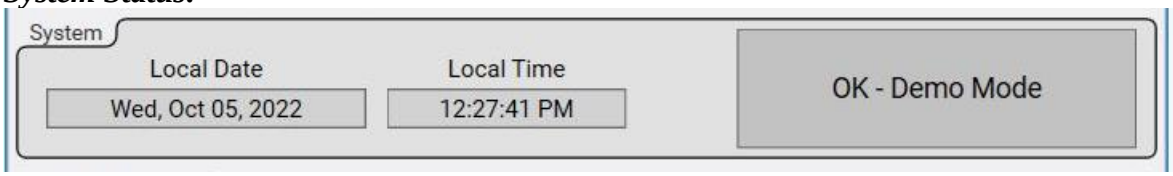
License and Activation keys can be acquired by visiting https://ultcontrol.com/modules/pray-times/

Control Layout

Times Page:



System Status:

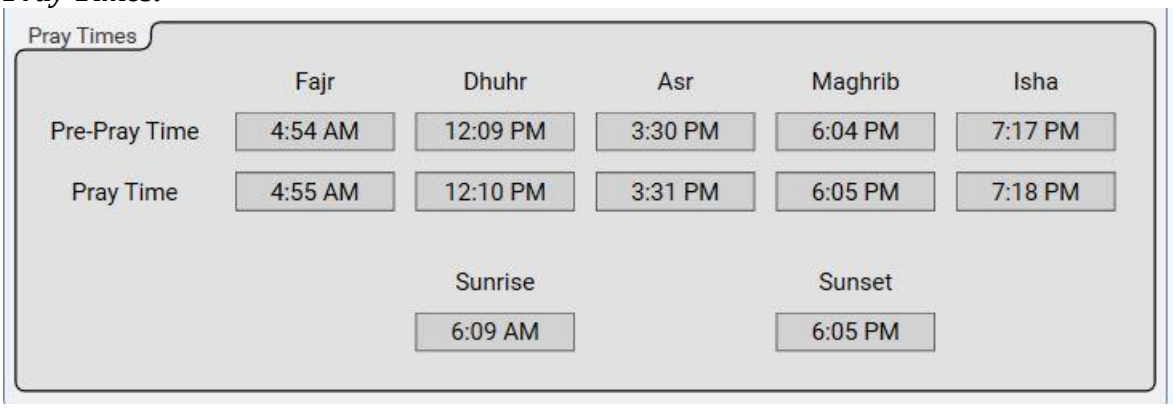


Local Date: Displays the local date as set on the Core processor

Local Time: Displays the local time as set on the Core processor, the format of the time shown here is updated to follow the time format set in the settings page

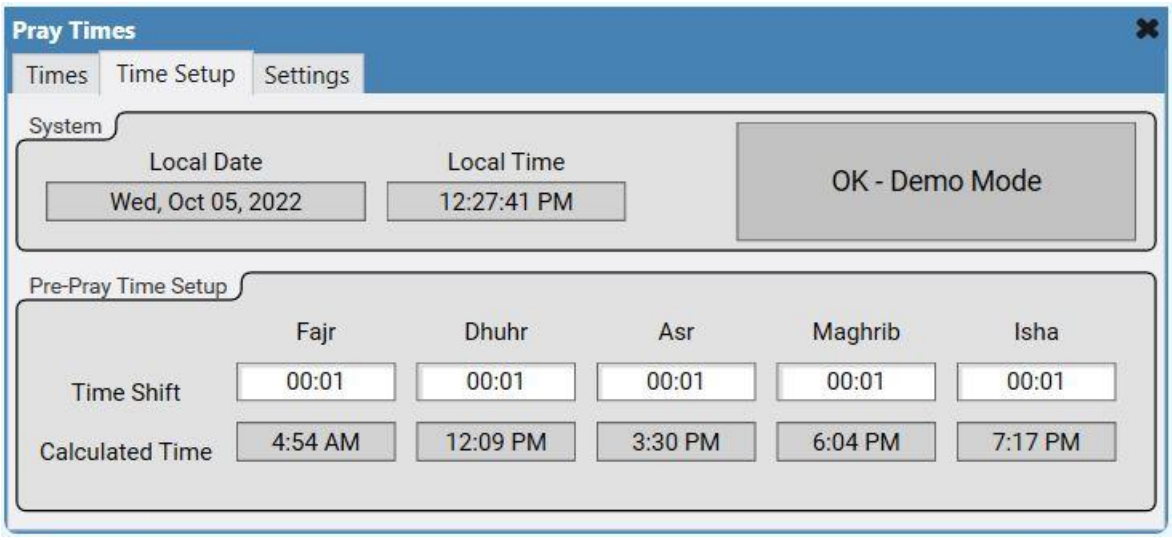
Status: Shows the plugin status whether in full or demo mode

Pray Times:

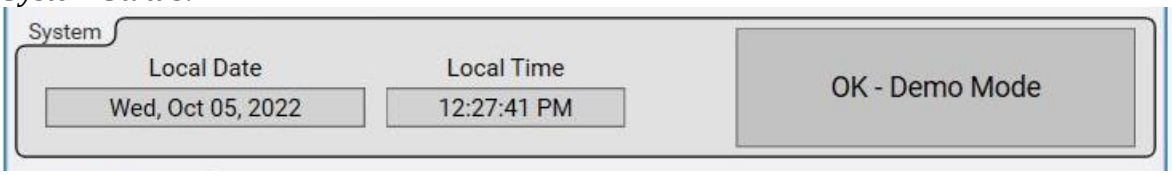


Pre-Pray Times: Display the calculated time for pre-pray events to trigger, this is updated based on the time shifts set in the Time Setup page
Pray Times: Display the calculated time for pray events to trigger, this is updated based on the calculation setting and parameter set in the Settings page, times are updated every day at midnight to show the new day times
Sunrise & Sunset Times: Display the calculated time for sunset and sunrise respectively, this is updated based on the calculation setting and parameter set in the Settings page, times are updated every day at midnight to show the new day times

Time Setup Page:



System Status:



Local Date: Displays the local date as set on the Core processor

Local Time: Displays the local time as set on the Core processor, the format of the time shown here is updated to follow the time format set in the settings page

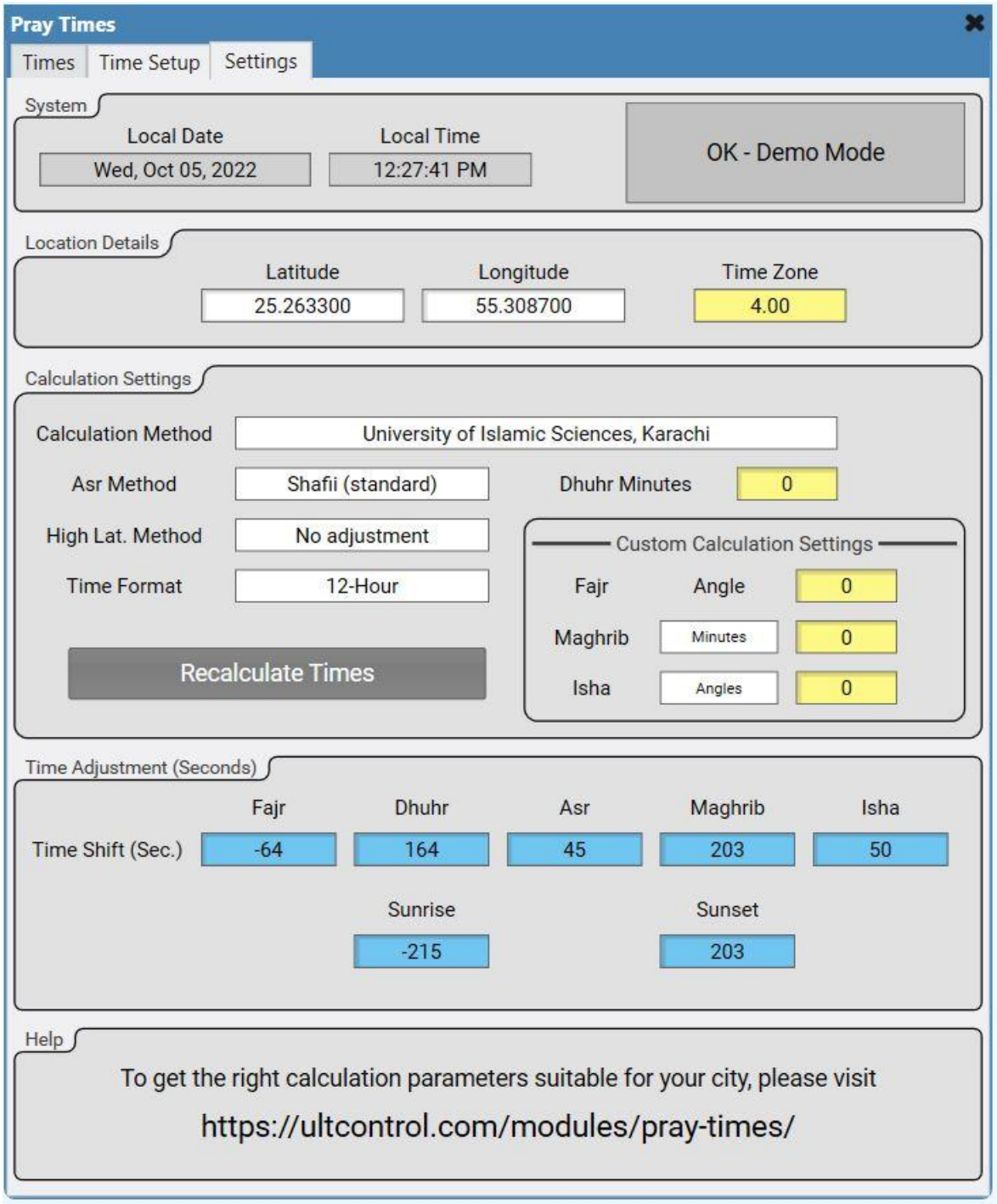
Status: Shows the plugin status whether in full or demo mode

Pre-Pray Time Setup:

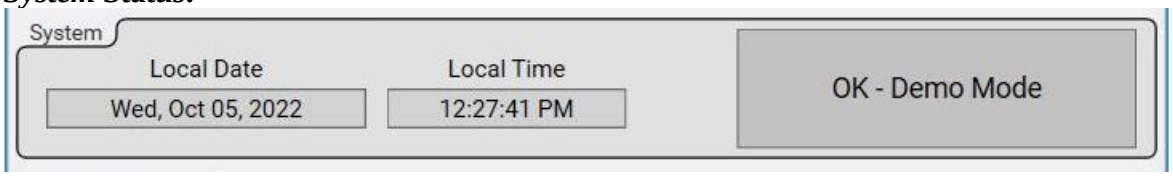
Time Shift: Displays the current time shift set for each pray for the pre-pray time triggers, this is the number of minutes for the pre-pray triggers to activate before pray times

Calculated Times: Display the calculated time for pre-pray events to trigger with the time shift set int the corresponding time shift settings.

Settings Page:



System Status:

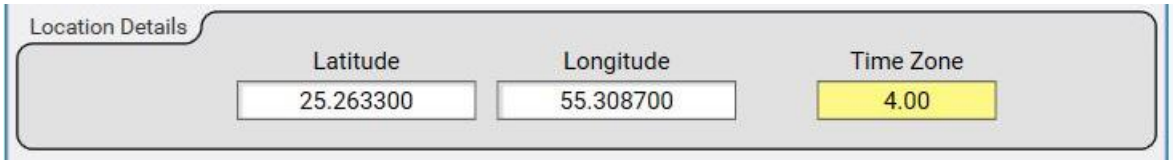


Local Date: Displays the local date as set on the Core processor

Local Time: Displays the local time as set on the Core processor, the format of the time shown here is updated to follow the time format set in the settings page

Status: Shows the plugin status whether in full or demo mode

Location Details:

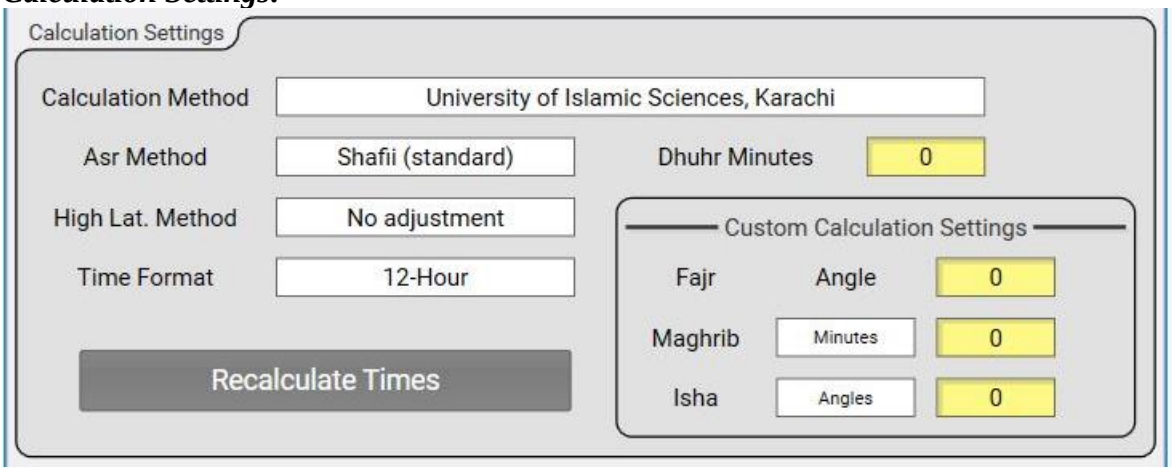


Latitude: Sets the latitude value of the target location to calculate pray times for.

Longitude: Sets the longitude value of the target location to calculate pray times for.

Time Zone: Displays the time zone as set on the Core processor, this is a read only parameter, make sure to set the Core processor to the correct time zone for the plugin to work properly.

Calculation Settings:



Calculation Method: Sets the calculation method to be used to calculate pray times for the target city, supported methods are:

- Custom Settings
- Shia Ithna Ashari (Jafari)
- University of Islamic Sciences, Karachi
- Islamic Society of North America (ISNA)
- Muslim World League (MWL)
- Umm al-Qura, Makkah
- Egyptian General Authority of Survey
- Egyptian General Authority of Survey (bis)
- Institute of Geophysics, University of Tehran
- Fixed Isha Angel Interval
- UAE General Authority of Islamic Affairs and Endowments
- Kuwait
- Qatar
- Algerian Minister of Religious Affairs and Wakfs
- Tunisian Ministry of Religious Affairs
- Diyanet İşleri Başkanlığı, Turkey
- JAKIM (Jabatan Lemajuan Islam Malaysia)
- MUIS (Majlis Ugama Islam Singapura)
- SIHAT/KEMENAG (Kementerian Agama RI)
- UOIF (Union Organization Islamic de France)
- France - Angel 15
- France - Angel 18
- Spiritual Administration of Muslims of Russia

Dhuhr Minutes: Sets the number of minutes to be added to noon time for Dhuhr pray time, supported values are 0 to 100 minutes.

Asr Method: Sets the Asr method to be used to calculate pray times for the target city, supported methods are:

- Shafii (standard)
- Hanafi

High Latitude Method: Sets the Hight Latitude Adjustment method be used to calculate pray times for the target city, supported methods are:

- No adjustment
- Middle of Night
- 1/7th of Night
- Angle/60th of Night

Time Format: Sets the preferred time format to be used when showing all times in the plugin, including system time, pre-pray times and pray times, supported formats are:

- 24-Hour
- 12-Hour
- 12-Hour No Suffix

Custom Fajr Angle: Sets the value of Fajr angle to be used to calculate Fajr pray time, this field is active only if the **Calculation Method** is set to Custom Settings, supported values are 0 to 100 degrees.

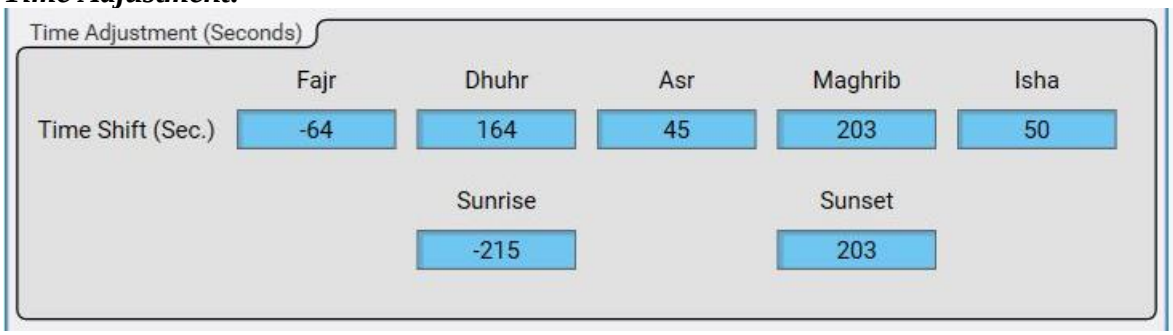
Custom Maghrib Unit: Sets the unit of Maghrib calculation parameter, supported unites are Angles or Minutes.

Custom Maghrib Value: Sets the value of Maghrib angle/minute to be used to calculate Maghrib pray time, this field is active only if the **Calculation Method** is set to Custom Settings, supported values are 0 to 100 degrees/minutes.

Custom Isha Unit: Sets the unit of Isha calculation parameter, supported unites are Angles or Minutes.

Custom Isha Value: Sets the value of Isha angle/minute to be used to calculate Isha pray time, this field is active only if the **Calculation Method** is set to Custom Settings, supported values are 0 to 100 degrees/minutes.

Time Adjustment:



Time Shift: Sets the number of seconds to add or subtract from the calculated times to make the times as close as possible to the official pray times of the target city, supported values are -600 to 600 seconds.

To get the calculation parameters and time adjustment settings of your city, please visit https://ultcontrol.com/modules/pray-times/

Control Pins

Calculation Settings:

General		
Name	***Control Type***	***Values***
Latitude	String	-90 to 90
Longitude	String	-180 to 180
Time Zone	Float	
Calculation Method	String	Custom Settings Shia Ithna Ashari (Jafari) University of Islamic Sciences, Karachi Islamic Society of North America (ISNA) Muslim World League (MWL) Umm al-Qura, Makkah Egyptian General Authority of Survey Egyptian General Authority of Survey (bis) Institute of Geophysics, University of Tehran Fixed Isha Angel Interval UAE General Authority of Islamic Affairs and Endowments Kuwait Qatar Algerian Minister of Religious Affairs and Wakfs Tunisian Ministry of Religious Affairs Diyanet İşleri Başkanlığı, Turkey JAKIM (Jabatan Lemajuan Islam Malaysia) MUIS (Majlis Ugama Islam Singapura) SIHAT/KEMENAG (Kementerian Agama RI) UOIF (Union Organization Islamic de France) France - Angel 15 France - Angel 18 Spiritual Administration of Muslims of Russia
Dhuhr Minutes	Float	0 to 100
Asr Method	String	Shafii (standard) Hanafi
High Latitude Method	String	No adjustment Middle of Night 1/7th of Night Angle/60th of Night
Time Format	String	24-Hour 12-Hour 12-Hour No Suffix

Custom Parameters		
Name	***Control Type***	***Values***
Fajr Angle	Float	0 to 100
Maghrib Unit	String	Angles Minutes
Maghrib Value	Float	0 to 100
Isha Unit	String	Angles Minutes
Isha Value	Float	0 to 100

Time Adjustment		
Name	***Control Type***	***Values***
Fajr	Integer	-600 to 600
Sunrise	Integer	-600 to 600
Dhuhr	Integer	-600 to 600
Asr	Integer	-600 to 600
Sunset	Integer	-600 to 600
Maghrib	Integer	-600 to 600
Isha	Integer	-600 to 600

Pray Time:

Times		
Name	***Control Type***	***Values***
Fajr	String	HH:MM (formatted as selected in Time Format Setting)
Sunrise	String	HH:MM (formatted as selected in Time Format Setting)
Dhuhr	String	HH:MM (formatted as selected in Time Format Setting)
Asr	String	HH:MM (formatted as selected in Time Format Setting)
Sunset	String	HH:MM (formatted as selected in Time Format Setting)
Maghrib	String	HH:MM (formatted as selected in Time Format Setting)
Isha	String	HH:MM (formatted as selected in Time Format Setting)

Triggers		
Name	***Control Type***	***Values***
Fajr	Trigger	
Sunrise	Trigger	
Dhuhr	Trigger	
Asr	Trigger	
Sunset	Trigger	
Maghrib	Trigger	
Isha	Trigger	

Pre-Pray Time:

Time Shift

Name	*Control Type*	*Values*
Fajr	String	0 to 60 (e.g. 60 or 1:00)
Dhuhr	String	0 to 60 (e.g. 60 or 1:00)
Asr	String	0 to 60 (e.g. 60 or 1:00)
Maghrib	String	0 to 60 (e.g. 60 or 1:00)
Isha	String	0 to 60 (e.g. 60 or 1:00)

Times		
Name	***Control Type***	***Values***
Fajr	String	HH:MM (formatted as selected in Time Format Setting)
Dhuhr	String	HH:MM (formatted as selected in Time Format Setting)
Asr	String	HH:MM (formatted as selected in Time Format Setting)
Maghrib	String	HH:MM (formatted as selected in Time Format Setting)
Isha	String	HH:MM (formatted as selected in Time Format Setting)

Triggers		
Name	***Control Type***	***Values***
Fajr	Trigger	
Dhuhr	Trigger	
Asr	Trigger	
Maghrib	Trigger	
Isha	Trigger	

System:

Name	*Control Type*	*Values*
Date	String	Day, Mon DD, YYYY
Time	String	HH:MM (formatted as selected in Time Format Setting)

General:

Name	*Control Type*	*Values*
Recalculate Times	Trigger	
Status	Status	OK OK – Demo Mode

Support

For plugin support or any information needed, please use the following:
https://ultcontrol.com/modules/pray-times/
support@ultcontrol.com