

Ambiflex

**MF620
OPERATOR'S
MANUAL**

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MAKING PROGRAMME CHANGES

To make changes, as opposed to using the preprogrammed overrides, it is necessary to 'unlock' the MF620 (see Page 3). The level at which the unit is unlocked determines the nature and level of changes which the user can make.

USING THE KEYPAD

Where this guide shows, e.g. **5** it means press Key 5, then release.

Where it shows two keys with a '+' sign, e.g. **#** + **0** it means press **#** first and whilst holding it down, press **0** then release both keys together.

Where it shows two or more keys without a '+' sign, it means press each key successively in the sequence shown, e.g. **1 5 5** means press **1** and release, press **5** and release 3 times.

UNLOCKING AND LOCKING THE MF620

TO UNLOCK

Press **9** to make sure MF620 is in standby display mode.

+ **9** The MF620 display will change to:

Access	Unlock
??????	Locked

9 and the cursor moves to the bottom line over the leftmost?

LOW LEVEL UNLOCK

Enter the low level password. If left at its default setting enter display as follows:

1 2 1 2 1 2

or appropriate password if this has been changed.

As each key entry is made, the '?' changes starting with the rightmost '?' to #.

When all six digits have been entered: **#** + **0** twice to accept.

If entered correctly, the display will change to:

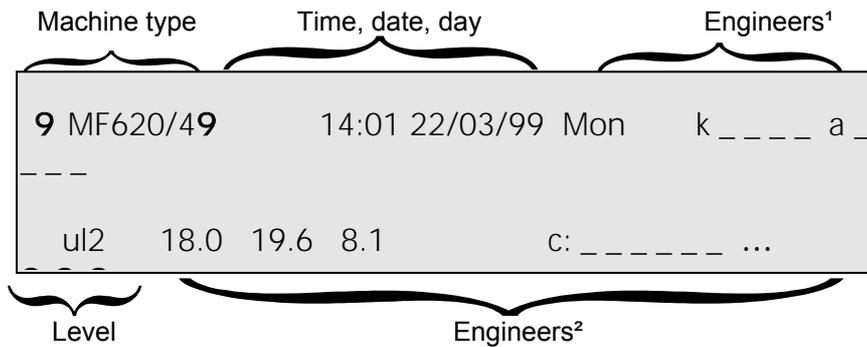
Access	Unlock
??????	Open, low

9 to return to the standby display.

MID LEVEL UNLOCK

Repeat above process using default mid level password:

0 1 2 3 4 5



When unlocked at mid level, the default display is as above.

Machine type	Machine type and revision number
Time, date, day	Time is in 24hour format. The date is displayed in the Day/Month/Year format.
Engineers¹	Concerns the overrides and alarms on the machine - for Ambiflex engineers only.
Level	Which level the machine is unlocked to.
Engineers²	Concerns time channel status and relay status - for Ambiflex engineers only.

LOCKING THE MF620

The MF620 will lock itself automatically 20 minutes after the last keystroke. To lock it before this press **0** to reach the standby display:

+ **0** then **3** **9** **5** then **#** **0**
0 to revert to the standby display.

TIME SCHEDULING

For most day to day operations it is not necessary to make changes to the Time Schedule settings. This is because override facilities are provided by the 4 (black) pushbuttons and/or the override keys **0**...**9**.

For details of what override facilities have been provided for use when the MF620 is 'locked' see the User Guide.

If however, it is necessary to modify time switching commands programmed at the commissioning stage, this can be done by the user but first the MF620 has to be unlocked by entering a password. This procedure was explained earlier under the heading **MF620 Unlock/Lock** (see Page 3).

LOW LEVEL

To change existing switching times only, the MF620 needs to be unlocked at its lowest level, i.e. Level 1. At this level the user is allowed access to:

1. Change any existing switching times for days already programmed.

It **does not allow** the user to:

- a. Add new switching times.
- b. Delete existing time switching commands.

MID LEVEL

If it is necessary to make time scheduling changes which:

1. Add new switching commands.
2. Delete existing switching commands for specific days.
3. Change command type; e.g. from '**Start**' to '**Opsrt**'.
4. Change temperature index levels x1, x2, etc.

It is necessary to unlock the MF620 at the mid level.

This still **does not allow** the user to make:

- a. Global deletions of complete time schedules.
- b. Set up new override facilities using 'flag' settings A,a,B,b, etc.
- c. Copy one time schedule channel to another time schedule channel.

These changes can only be made at the high or engineer level, Level 3.

MAKING TIME SCHEDULE CHANGES

Reviewing Existing Time Schedules

Unlock MF620 as explained in 'MF620 Lock/Unlock'.

From standby display position + and the display changes to:

Timesched Review	chnl 1	Anyday
STATION HTG	[#] = view	[5] = nxt chn

View the time schedule for channel 1 e.g.



The MF620 has six channels, i.e. Chnl 1 to Chnl 6 but the number used will vary for different applications.

To change the day on which the time schedule is viewed move the cursor from Chnl 1 to Anyday by pressing **3**. Then **5** to change this value i.e.

	Anyday
5 Goes to:	Week Days
5 Goes to:	Weekend
5 Goes to:	Mon (1)
5 Goes to:	Tues (2)
5 Goes to:	Wed (3)
5 Goes to:	Thu (4)
5 Goes to:	Fri (5)
5 Goes to:	Sat (6)
5 Goes to:	Sun (7)
5 Goes to:	Anyday

From Low Level Access

Changing Existing Switching Times

Once the required Time Channel has been selected, carry out the review procedure for that channel for 'Any day' by repeat pressing **#** until the line to be changed appears on the bottom line of the display, then:

9 And the cursor will move to the left hand digit of the time currently set.

h h m m to enter the new switching time.

e.g. **0 7 4 5** would set a time of 07:45 (24 hour format).

Once the correct time has been set, it can be entered into the system by **#** + **0** twice. Then **#** to move to the next command line.

To make changes to other time channels, select the required channel by scrolling (**5** or **2**) whilst the cursor is on the top line next to 'chnl'.

From Mid Level Access

If locked, unlock to Mid Level, as explained previously. This, in addition to allowing time changes, also allows the command type to be changed, days to be deleted, and the temperature index X1, X2, etc. to be changed.

If already unlocked at Low level and from the standby display:

+ **9** then **3 5 9** and the display changes to:

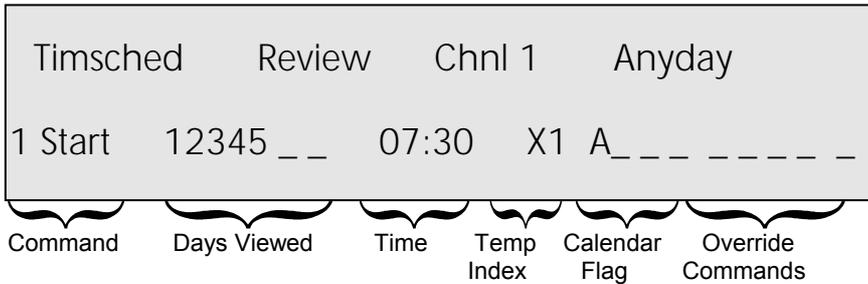
Access	Unlock
??????	open,low

Enter the Mid Level password, (default is **0 1 2 3 4 5**) and accept as described in 'MF620 Unlock/Lock' (Page 3).

Proceed with editing Time Schedules as for Low Level.

Changing Existing Time Command Lines

Once the required channel has been reviewed, and the first command line to be edited has been selected



9 and the cursor will move to the time command type on the left hand side of the bottom line of the display.

If the command type is to be changed, scroll using **5** or **2** until the new command type has been selected.

The command type may change from **start** to:

N/a This means not applicable.

'Cycle' This is a start command which means go into proportional load cycle mode at the time set.

'Opstp' This means switch off before or at the time set providing the target end temperature will be met.

'Stop' This means switch off at the time set for the days programmed.

'Pulse' Currently this command is not in use.

'Opsrt' Which means an optimised start to reach the target temperature at the time displayed.

Then back to **start**.

Then **#** + **0** and the cursor will move to the 'day' selections.

To add a day that is not already programmed, enter the day key number, e.g.

1 adds day 1 (Monday).

If the day is already programmed, entering the day number will remove it.

e.g. if display shows '1 2 3 4 5 _ _'

4 removes day 4 and display becomes '1 2 3 _ 5 _ _'

4 again restores day 4.

0 Removes all days which if accepted deletes that command line.

9 adds all days.

+ **0** to accept required day combination for the command being programmed and the cursor moves onto 'time'.

Enter new time, if required, as in Low Level.

+ **0** to accept new time and cursor moves to the temperature index column.

The selections here are '_ ' 'X1' 'X2' 'X3' 'X4'

To select use **5** or **2** key.

In most applications, the currently programmed index should be accepted by **#** + **0**. However, if adding a new command line (see next) the selection may be made. '_' defaults to 'X1' index when the MF620 is in operation.

Adding (Inserting) A New Command Line

This may be required if an additional time period, e.g. 'Evening Use' or 'Saturday Working' is to be provided.

The procedure is very similar to the editing process but to add a new time command line:

7 and the display will change to:

```
Timsched  Review      chnl 'n'  
'n' Stop  1 2 3 4 5 6 7 00:00 _ _ _ _ _ _ _ _
```

From here the process is the same as if **9** had been pressed except it is creating a new additional command line.

Once all changes have been made, review to confirm they have been correctly entered.

N.B. All new lines inserted at this level will not respond to calendar dates and override functions, if this is required please refer back to the commissioning engineer.

CALENDAR SCHEDULING

In both Low and Mid Level access existing dates for suspending and restoring daily time schedules may be changed.

At Mid level only, completely new (holiday/shutdown) periods may be added, i.e. if no calendar dates have been programmed, it is not possible to add any at Low Level access.

In most cases 'Channel 7' will have been preprogrammed. This means **all channels 1...6**.

CHANGING EXISTING CALENDAR DATES

As a standard convention, all MF620's are set where:

- 'a' after the date means 'suspend all daily time programmes **starting** on this date' i.e. the first day of holiday.
- 'A' after the date means 'restore all daily time programmes starting on this date' i.e. the first day of normal operation.

For this to work, all Timeschedule start commands i.e. '**Start**', '**Opsrt**', '**Cycle**', '**Pulse**' must have the 'A' flag set.

Return to the standby display by pressing . Then by pressing:

 +  the display will show typically:

Calsched	Review	chnl 1
STATION HTG	[#] = view	[5] = nxtChn

After selecting the required channel (including 'chnl 7') and reviewing existing dates, review again until first date to be changed is displayed then:

9 then enter new date e.g. **2** **5** **0** **8** = 25 August

+ **0** to accept.

+ **0** again to accept 'A' etc.

to move to next date which should have 'a' (every 'suspend' date (a) should be followed by a restore date (A) and vice versa).

9 To enter new date, **#** + **0** to accept, **#** to move to next date.

Carry on until all dates have been reviewed, changed and accepted. Incorrect values such as 59/14 will not be accepted by the system. All entries must be in 'dd/mm' format (not American mm/dd format).

N.B. CALENDAR DATES ROLL ON CONTINUOUSLY; THEY DO NOT STOP AT THE END OF THE CURRENT YEAR.

ADDING (INSERTING) NEW CALENDAR DATES

Unlock the MF620 to midlevel and proceed as for changing dates. To add a new (extra) start holiday date:

7 The display will show '01/01 _ _ _ _'

d **d** **m** **m** to enter new date.

+ **0** to accept date; the cursor moves to the first 'flag' space i.e. the 'A' flag.

5 Repeated to select 'A' or 'a' flag then **#** + **0**

Carry on until all additional dates have been entered. The MF620 will sort them chronologically.

Remember every 'suspend' (a) date must be followed by a 'restore' (A) date.

TIME (CLOCKTIME) SETTING

BRITISH SUMMER TIME (BST)

BST start/end dates may be set in one of two ways:

1. If the BST **start** date is set with the month only with no days, e.g. 00/03 for March the MF620 will change from Winter to Summer Time at 02:00 on the **last Sunday** in March, every year.

Occasionally this will be wrong for a period of 1 week only in some years. When the time change takes place on the Sunday before the last Sunday in the month.

2. If the BST **start** date is set with both month and days, e.g. 26/03 it will change from Winter to Summer Time at 02:00 on the date set, i.e. 26th March every year until changed.

BST end time is set in exactly the same way except the month is normally dd/10 i.e. October.

CHANGING CLOCKTIME AND STARTING THE CLOCK

The MF620 will normally be shipped with the clocks started, however, should the clock be stopped please refer to your commissioning engineer.

Changing Clock Time

Changing clock times can be done from both Mid and Low Level access levels (see Pages 3 + 4 for unlock instructions).

+ **9** And display changes to the Time Keep menu with the cursor over the 'C' of Clockset.

Time Keep	Clockset	
16:22	06/08/01	Mon BST

9 and the cursor moves to the time at the left hand side of the display.

h **h** **m** **m** to enter correct time, then **#** + **0**

d **d** **m** **m** **m** **m** to enter date including year

+ **0** and then clock will update 'Day' and 'BST' will update automatically.

N.B. When the clock time is set and has been accepted with **#** + **0** the clock starts at that time and the first change will occur 1 minute later.

BST Dates (from mid and higher Access levels only)

From the Time Keep menu with the cursor on the second column:

2 until 'BST dates' is selected.

9 to edit.

Enter **0** **0** **m** **m** to select 'last Sunday in month' option,
then **#** + **0**.

Repeat for 'Finish' date.

If exact Start/Finish dates are to be entered each year, carry out set up as above but instead of

0 **0** **m** **m** enter **d** **d** **m** **m**

USER NOTES

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