



A member of the United Technologies Corporation family



Order No. 18158-20 - 02/2002

Supersedes order No. : 18158-20 - 11/2000

Manufacturer reserves the right to change any product specifications without notice.

Monday  
Tuesday  
Wednesday  
Thursday  
Friday  
Saturday  
Sunday  
November 12, 2003

**TODAY  
YOUR CLIENTS  
NEED A TOTAL  
SOLUTION**

Carrier®

THAT IS WHY CARRIER  
CREATED *Aquasmart*  
ACTIVE AIR CONDITIONING  
INTELLIGENCE

THE HYDRONIC SOLUTION

*Aquasmart*

day  
/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31  
/18/19/20/21/22/23/24/25/26/27/28/29/30/31  
05/06/07/08/09  
Saturday

Week

12.37



Sunday / Monday

Week

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

Sunday

Saturday



# CONTROL THE COMPLETE SYSTEM BY ELECTRONIC INTEGRATION OF ITS COMPONENTS

In today's air conditioning systems the components such as fan coil units, cassettes, chillers, and air handling units often operate in an autonomous and independent way without a communicating element. With Aquasmart, the control intelligence in each component is complemented by the System Manager, which fully integrates the solution resulting in better energy management.

Monday  
1/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31  
17/18/19/20/21/22/23/24/25/26/27/28/29/30/31  
1/05/06/07/08/09  
Saturday





Chiller/heat pump



System Manager



Boiler



Fan coil unit



Cassette



High-Wall



Ducted unit

# THE CARRIER COMMON LANGUAGE

With the Carrier communication network and associated software programs, all the air conditioning system components work in harmony using a common language.

The program offers numerous possibilities: installation configuration, fault indication, alarms history. Essential data for safe maintenance.

# CENTRALISE DATA TO OPTIMISE EVERYONE'S COMFORT



## A SOURCE OF SAVINGS

By controlling up to 128 terminals in 32 zones per system and the chillers and heat pumps simultaneously and from a single point, Aquasmart is set to become the best performing air conditioning management system. Each zone benefits from a temperature truly compatible with the occupant's requirements and the building demands. With Aquasmart, there is no need to expend energy unnecessarily by conditioning a room temporarily or permanently empty. Simple programming, easy maintenance: air conditioning has never been more economical.

Monday

1/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

4/05/06/07/08/09

Saturday

ay

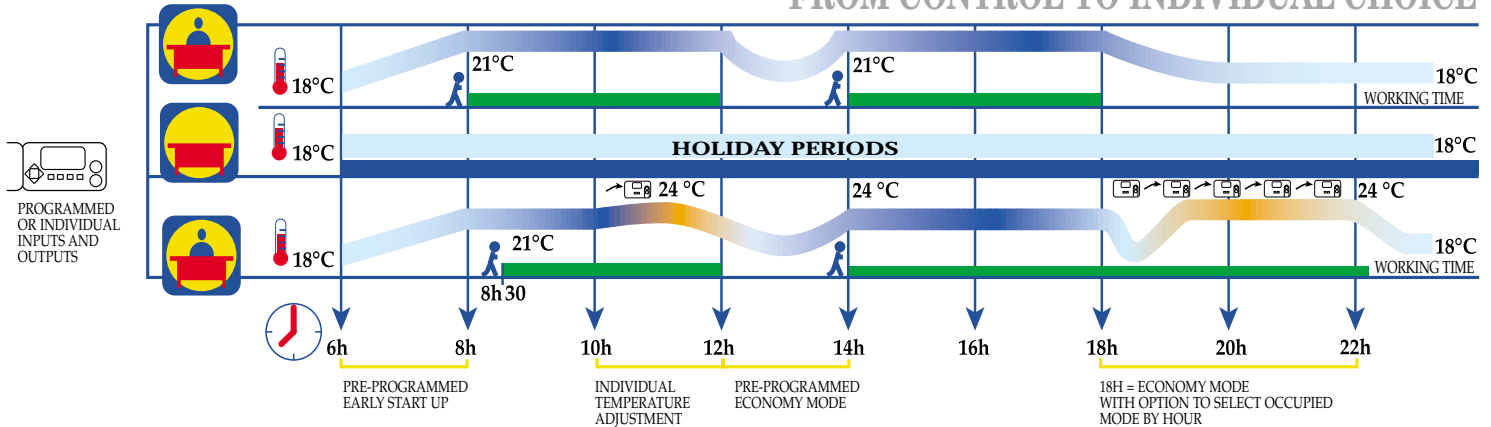


**"OCCUPIED" MODE:** Very user-friendly, the user interface in each zone allows adjustment of the temperature in accordance with the occupant's wishes. Maximum and minimum temperatures and fan speed are individually adjustable depending upon program configuration.

**"ECONOMY" MODE:** During unoccupied periods, the air conditioning is automatically switched off. However, the occupant can select occupied mode for a specified duration.

**"FROST PROTECTION" MODE:** During weekends or holiday periods, a programmable minimum temperature is maintained in the building.

## FROM CONTROL TO INDIVIDUAL CHOICE





# SOPHISTICATED AIR CONDITIONING CONTROL MADE SIMPLE

Monday

5/1/6/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

04/05/06/07/08/09

Saturday

Monday

To simplify on-site installation, nothing is left to chance:

- Equipment is complete ready to install, configured and factory tested.
- Simple electrical connections.
- Default parameter settings and automatic addressing simplify system start-up. Configuration is from the System Manager keypad.
- End user operation instruction is very straight-forward.



Sunday / Monday

Week

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

01/02/03/04/05/06/07/08/09

12.3

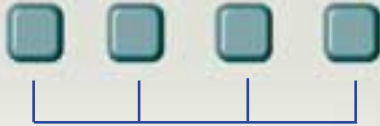
12.37

Saturday

Sunday / Monday



**4 NAVIGATION  
BUTTONS**



**4 MENU ACCESS  
BUTTONS**



**2 ONE-TOUCH  
ADJUSTMENT  
BUTTONS +/-**

## CUSTOMER DEMANDS FOR SIMPLICITY ANSWERED

- User-friendly and easily accessible menus.
- Instant individual control in each zone.
- "Economy" mode.
- "Frost protection" mode.
- 4 time schedules/day per week for maximum 32 zones.





Week

Sunday / Monday

01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31

12.37

01/02/03/04/05/06/07/08/09

Saturday

# INSTANT DISPLAY OF ALL PARAMETERS ENABLES MAXIMUM EFFICIENCY

By registering all data at a single point, the System Manager optimises system operations guaranteeing efficient control, monitoring and programming.





## DATE

Date.



## TIME

Time of day.



## SYSTEM MODE

The System Manager selection of:  
cool, heat, cool and heat, no demand.



## OPERATING MODE

Cool, heat, cool and heat.



## MAIN UNIT STATUS

Indicates the operating status of the main unit.



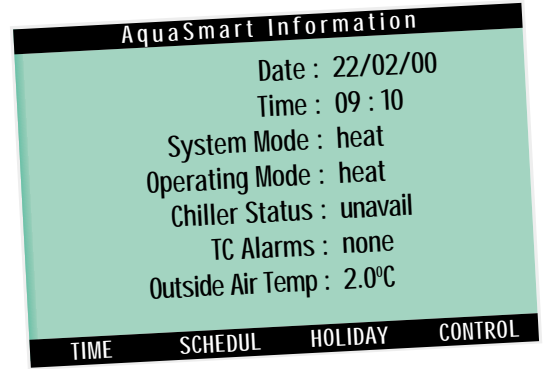
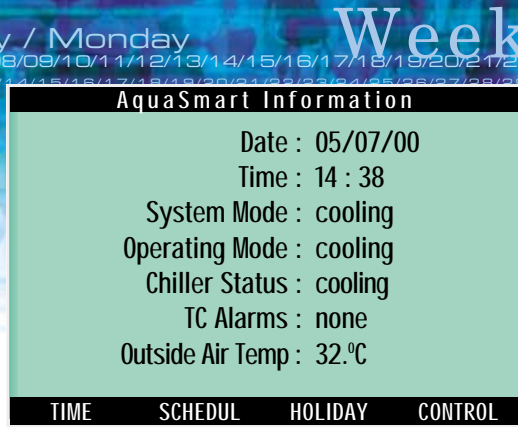
## ALARM

Indicates terminal operation faults.



## OUTSIDE AIR TEMPERATURE

Indicates the outside air temperature.




Screen matrix, 10 lines, 24 characters.

# FOR A BETTER UNDERSTANDING CARRIER KNOWS THE QUESTIONS AND THE ANSWERS



Sunday / Monday  
01/02/03/04/05/06/07/08/09/10/11/12  
01/02  
12.37  
Sun



**SIMPLICITY:**   
**NATURALLY**  
**PEACE OF MIND:**  
  **A MEASURE**  
**OF EFFICIENCY.**



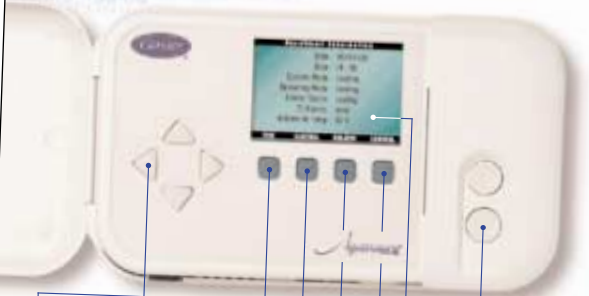
Week  
1/2/3/4/5/6/7  
ay

# COMPLETE INFORMATION

# SETTING THE TIME

## ALL YOU NEED TO MAXIMISE EFFICIENCY.

Designed for user-friendly operation, easy to follow and reliable. Maximum simplification for optimum operation. No additional tools required for configuration of the installation and operation. The System Manager has ten dedicated buttons for menu selection, screen navigation and value modification.



### 4 NAVIGATION BUTTONS

These four buttons are used to select the parameter on the screen to be modified.

### 4 MENU ACCESS BUTTONS

Four user menu access buttons: **TIME - SCHEDULE - HOLIDAY - CONTROL**. These four access buttons are used to select the menu displayed above them e.g.:

- TIME
- SCHEDULE
- HOLIDAY
- CONTROL

### LIQUID CRYSTAL DISPLAY

A single screen for quick and easy reading of data. A ten-line matrix display. A clear screen layout.

- 1: Screen name
- 2: Information and data display zone, with drop-down menu (7 lines).
- 3: Selection of screen line to be modified.
- 4: Menu access by Menu buttons.

### 2 ONE-TOUCH VALUE ADJUSTMENT BUTTONS

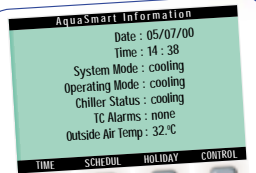
These two **INCREASE/DECREASE** buttons are used to modify the selected values in the display zone.



### 4 USER BUTTONS

Day, month and year. Operating schedule.

Relating operating parameters applied Mode override IGES Control.



Press the "TIME" button to display the "MODIFY TIME AND DATE" screen.

**NAVIGATION BUTTONS.** Select the line to be modified (in this case hour). Modify the value using the "INCREASE/DECREASE" buttons and then select the "INCREASE/DECREASE" buttons and then select the minutes, modify and then press "EXIT" to confirm the changes. Press "YES" or "NO" as appropriate.

Follow the same procedure to change the other parameters.

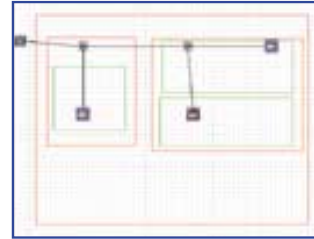
TIME and DATE  
Schedule  
Holiday  
Control

How do you set all the parameters in order to obtain optimum control? How do you react to alarms and indicators? Essential questions which Carrier answers in the "System Manager Users Guide". 12 clear, comprehensive and easy-to-follow pages quickly provide the answers to your questions.

# AN EFFICIENT GUIDE FOR MORE PEACE-OF-MIND

# CARRIER OFFERS PRODUCT OPTIMISATION AND EASY INSTALLATION

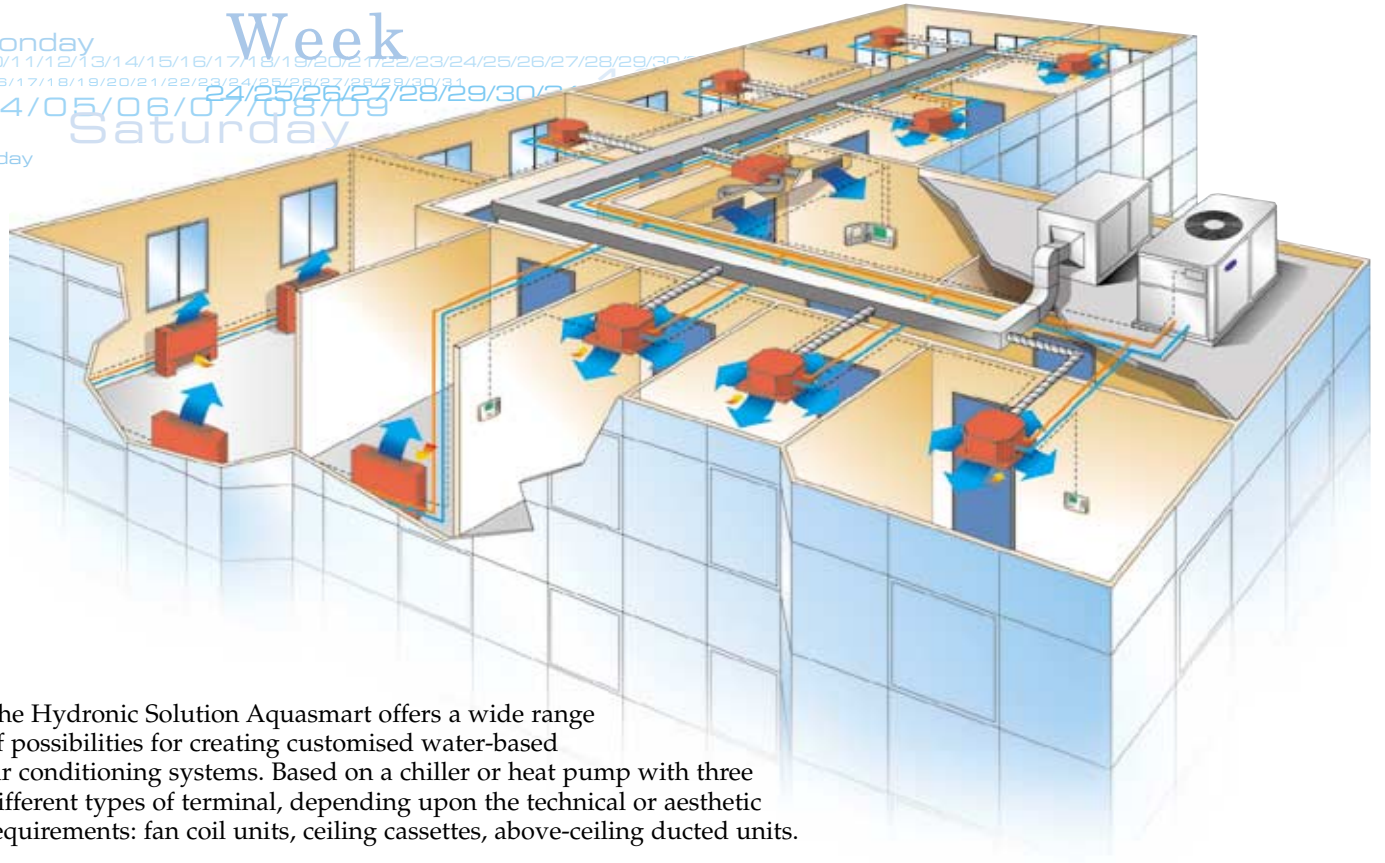
Whatever the arrangement of the building that you wish to fit out, the Carrier professionals are at your disposal to provide the most efficient solutions. The Carrier selection program identifies all the air conditioning components, in order to obtain the best configuration to meet the specific building requirements.



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/09/10/11  
0 1 / 0  
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Monday / Monday  
06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31  
1/2/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31  
17  
Sunday / Monday

Week  
Saturday



The Hydronic Solution Aquasmart offers a wide range of possibilities for creating customised water-based air conditioning systems. Based on a chiller or heat pump with three different types of terminal, depending upon the technical or aesthetic requirements: fan coil units, ceiling cassettes, above-ceiling ducted units.