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Owner's Manual

OYSTER DIGITAL CI

CAUTION

In order to avoid the danger of fire and the danger of an electric strike or damage to the equipment, the equipment should be protected from rain and humidity.

The housing should not be opened to avoid an electric strike. Leave the maintenance work to a specialist.

Do not introduce any object through the ventilation slots.

Do not position the equipment where there is insufficient air movement. If the equipment is mounted on a shelf or in a fitted cupboard, sufficient cooling must be available. Do not cover any of the ventilation slots on the housing in any way.

Of special note

Should an object or a liquid enter the housing, separate the equipment from the power supply immediately and leave the checking out to a specialist, before you use it again.

Position the equipment in a place where **sufficient air circulation** is guaranteed and where **no heat source is in its proximity**. This avoids an internal build-up of heat and ensures a long life.

Do not stand anything on the equipment - if the ventilation holes are blocked, this can lead to malfunctioning.

Switch the receiver off before connecting the other equipment.

If you notice an unusual smell or smoke, the equipment should be separated from the power supply and the checking-out left to a specialist.

The equipment must be connected directly to the vehicle's battery with 2.5 mm² to 6.00 mm² cross-section cables. Check to insure that the equipment is not connected to an electronically controlled battery charger.

The equipment requires well-filtered 12V (11,0V – 16,0V) DC power supply. Direct connection to any kind of battery charging equipment will lead to malfunction and can damage the equipment.

Any connection to an AC (eg: mains) power supply will immediately destroy the equipment and any connected systems.

Any use of improper power supply will void the warranty.

Ensure that all cabling and equipment parts are located away from possible sources of interference such as mobile telephones, electronic heating controls or radio equipment.

For the connection of the external unit (receiving antenna) only use the supplied cable set or the extension cable set which can be supplied as an accessory.

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Introduction

Your Oyster Digital Satellite Receiver unit is an intelligent receiving system, which functions fully automatically and releases you from the whole laborious adjustment work of a manual system.

Unlike a normal television antenna, a satellite unit must always be exactly aligned to the satellite beam. There must be no interference with the signal from trees or other obstructions otherwise satellite reception is not possible.

Always ensure that there is a “free view to the north”.

In order to get around a situation of not receiving comfortable satellite transmissions, your Oyster Digital is removable. You can take it from the roof at any time and set it up in a secure receiving position in the proximity of your vehicle. This only requires a special floor support and extension cable (available as a “Floor installation kit” accessory).

If a satellite unit is installed within a house, this generally requires only a simple initial set up. As when you are mobile and your location is always changing (even a movement of a few centimetres can require change), the satellite unit must be readjusted. However for you as an Oyster Digital owner this only means the pressing of a button.

Oyster means exceptional operating comfort and programme versatility. Pressing a button aligns the equipment and searches for all receivable satellites. The microprocessor controlled fine adjustment as well as the digital receiver technique provides for the best picture quality. Then you have all the TV and radio programmes the new digital transmitting satellites simply through the remote controller. In fact you can control the sound volume of the television through the Oyster remote control. This spares you the complication of two remote controllers.

In order to meet various customer requirements, in addition to the normal switch-off procedure your Oyster Digital also incorporates the facility of switching off with open standing equipment (sleep mode). Therefore, with several usages over the day, the fold up and fold down procedure of the dish can be avoided, while power saving standby mode is available though.

On the first pages of these instructions you will find information on the operation of the general functions of the receiver, then descriptions of the special functions of the Oyster Digital as well as detailed explanations on the search functions.

Putting into operation

Following the unpacking

Check the delivery package of the OYSTER DIGITAL.

The following parts should be completely to hand:

Receiver (decoder) box

Top box unit (external unit to be fit onto the roof of vehicle)

Dish

Mounting plate

Screw packages

Cable sets

- 5m interconnection cable from decoder to top box
- SCART to RCA cable
- Aerial cable
- 3pin power supply cord

Sat-Mouse (remote eye)

Remote controller

2 batteries for remote controller

Operating Instructions

Installation Instructions

Disposal information for packaging

The packaging and packing materials are recyclable and should generally be recycled when possible.

Packaging material as e.g. plastic bags should not fall into the hands of children.

Connection of the equipment

The following connections of the receiver must be made for putting into operation:

TV (Scart)	Connect the “TV-Scart” socket of the receiver using a SCART cable or SCART to RCA cable with your TV.
TV OUT	Alternatively you can connect your TV also through this antenna socket (aerial) to the receiver.
SAT IN	Connect the supplied white coaxial cable from the top box unit with this socket
12V – 24V power supply	Connect the 3-pin power supply cable from the 12V battery of your vehicle with this socket.
ANTENNA CONTROL	Connect the supplied control cable (4-pin plug) from here to the top box (external) unit
SAT MOUSE	Plug the supplied external remote eye in here



Optional equipment

AUDIO	Should you want to connect a car stereo system (eg.: radio), you can plug an audio RCA cable (L&R) in here
VCR (Scart)	A video recorder can be connected here to via an optional SCART or SCART-RCA cable. Also, a second TV can be connected here.
SAT OUT	Should you want to use a second decoder box, you can pass on the satellite signal to this through the SAT OUT connector.
ANT IN	Here you can connect an existing aerial antenna, which will then be passed on to the TV OUT (but NOT to TV or VCR SCART)
RS232	The RS232 can connect a PC, to update the current channel list or software. Additional hardware and software required.

Operation of the receiver

Before you can operate the receiver the main switch on the rear side must be switched to “I” (ON). If this switch is on “0” (OFF) the Oyster Digital is completely separated from the power supply.

In a normal television operation you can select the following functions through the remote controller:

 (red)	Power ON and Power OFF button. Use this to activate your system from standby or to retract (fold down) the antenna and switch into standby
MUTE 	If this button is held down continually for approx. 3 seconds, then the Oyster Digital switches to Standby WITHOUT retracting the antenna (Sleep Function) Short: Sound mute switch on/off
P+ /P-	Changes to the previous or next channel in the channel list
TV RADIO	Changes between TV and radio modes
+/-	Increase / decrease sound
MENU	Call up the Oyster Digital OSD menu
OK	Inserts the status panel or confirms / selects menu options
EXIT	Aborts current OSD menu operation
SWAP	Change back to the last selected channel
AV	Switch through the signals from a connected video recorder to the TV and as well the SAT IN signal to the SAT OUT connector.
LIST	Shows up the list of available channels onto the display

Operating without remote control

An emergency operation of the receiver is possible through the two buttons on the separate remote eye (Sat-Mouse), if no remote controller is available. In which case the buttons have the following functions:

→	Change to the next channel in the channel list
←	Change to the previous channel in the channel list
←/→	<p>If the two buttons are pressed for a short moment at the same time you can toggle between RADIO and TV and vice-versa.</p> <p>If you press the two buttons for a longer time the antenna will retract and the unit will switch off. This corresponds to the pressing of the red standby button on the remote controller.</p> <p>If the unit is in standby, a short pressing of both buttons will switch it on.</p>

The remote control

MUTE: Press to MUTE the audio. Press and hold for approx. 3sec. To activate the SLEEP feature (Switch to Standby, but keep the antenna open)

TV: Activates the TV mode. If no signal is received, the antenna will move to the last known position with a good signal (if memorized).

AV: Switches to VCR operation. (VCR SCART is fed to the TV SCART), as well SAT IN is fed to SAT OUT

OK: Press to confirm any dialogue on screen or to activate the programme information display.

VOL-: Reduces the volume. Also used to navigate in menus (e.g. decrease values).

i/EPG: Shows the full programme information (EPG) if applicable.

Green: Freezes the picture. Press again to release.

Blue: Equal to SWAP.

Red: No function.

Yellow: No function.



Power: Power ON/OFF the Oyster. Retracts or opens the antenna.

RADIO: Activates the RADIO mode to listen.

LIST: Shows the full programme (channel) list on screen.

0..9: Number digits to select any channel (Type in 4 digits or alter-natively less and wait 2 sec. until accepted)

SWAP: Swaps back to the previously seen channel.

EXIT: To leave any On Screen Menu Settings.

VOL+: Increases the volume. Also used to navigate in menus (e.g. increase values).

P+▲: Channel plus. Also navigates upwards in menus.

P-▼: Channel minus. Also navigates downwards in menus.

MENU: To open the On Screen Display menu.

Operation of the menus

The operation of your receiver is carried out through the supplied remote controller. The navigation within the integrated screen menus is achieved through the following buttons:

MENU	Opens the fast view menu for simple access to the stopping of the current programme and for access to the Oyster Digital Functions. Press MENU a second time in order to call up the main menu.
P+ / P-	Moves the current selection in the menu upwards and downwards
+/-	In lists: moves in the list page by page In data fields: changes the value to be adjusted
OK	Opens, confirms or prepares the directly lightly marked entries
EXIT	Leaves the directly active menus. Press EXIT several times in order to delete all menus.
SWAP	In menus with several windows SWAP changes back and forth between windows.
EPG	Call up of the EPG. With the first press of the info button, the current programme is displayed. A further press opens the list with the programme summary for the whole day.
LIST	Indication of the transmitter list.

In order to reach the OYSTER DIGITAL Functions, press 1 x MENU, then move with P+/P- the light line onto “Oyster Digital” and then press OK.

The description of all OYSTER DIGITAL functions is to be found on page 25.

Basic settings

Following the first switch-on, some adjustments should be made in the operating software. Please carry out the following steps:

1. Call up the main menu.	2 x MENU
2. Select the “Edit settings” menu and then the sub point “General”	P+/P- OK
3. Input your current time zone. For Queensland: +10:00 For Southern Australia and Northern Territories: +09:00 For Western Australia: +08:00 This setting must be updated each time following the summer time change, if applicable. You can change the setting either with the arrow buttons or through the direct inputting of the numbers.	0 -9 +/-
4. Leave the general adjustments with EXIT.	
5. Go to the topic “Save settings”. Press OK and wait until the menu disappears.	P+/P- OK

All further configuration facilities will be explained detailed on page 18 in the section “Configuration of the receiver”.

Channel selection and channel list

The receiver internally holds a channel list. This list shows up all available channels, when activated.

As an advanced feature it is possible to deselect single satellites, so the channels associated with the deselected satellites will no longer be available through the channel list.

To select a channel there are several possibilities:

P+ / P-	Changes to the previous or the next channel in the channel list
TV RADIO	Changes to TV or radio modes
SWAP	Changes between the current channel and the previously activated channel and vice-versa. For this the operation software notes as the previous channel always the one which was last activated for at least one second. When changing the channels quite fast all channels that have been activated for a very short period of time will be ignored by the SWAP automatic.
0 - 9	The channel numbers can also be directly inputted with the 0-9 digit buttons. You can put in any count of digits (1-4). When putting in less than 4 digits, there will be a 2 sec. timeout before the selected channel will become active. To bypass this timeout you may press OK after putting in your desired channel number or just hold down the last digit on the remote a moment longer. Note: With direct number inputting it is also possible to select empty channel numbers or channels of deactivated satellites, while P+ / P- bypasses inactive channel numbers.
LIST	Displays the whole channel list. Navigate there with the P+ / P- buttons to the required channel. Then press OK in order to activate it. In the list you can likewise use the TV / RADIO buttons to change between the TV and the RADIO list. While the list shows up on the screen you can as well use the direct channel input with the 0-9 buttons. It requires an additional press of the OK button to activate the channel selected.
EXIT	If the status panel has disappeared, you can also call up the channel list with the EXIT button.

EPG - electronic programme guide

Some, but not all, of the channels available offer an electronic programme guide to show up information about the currently transmitted content as well as future content that will be transmitted soon.

The Oyster Digital decoder is able to handle EPG information up to 64 days in front, if such information is transmitted. Any information presented on the satellite is recognized automatically by the decoder and stored internally.

To display the given information, you just need to press the EPG button on your remote and any available information will be presented on screen.

Please ensure that under Main menu → Edit settings → Time Zone the correct value has been set. (+10:00 for Queensland, different figures for the other states). Please ensure correct summer time setting (if applicable).

The status panel

When you select a transmitter, the title and a short description text of the current transmission will appear in the status panel if presented by the providing TV station. For further information please call up the EPG.

The EPG

This is your electronic programme guide. The following summary explains the individual functions of the EPG:

Detailed view	In the current programme acquire the EPG with the EPG button. There will be displayed the latest listed information on the current transmission.
Detailed view of the following transmission	For the Info on the following transmission change with the +/- buttons.
Daily summary	<p>With a further press on the EPG button from the detailed summary you can get a detailed view of the list. There you can see all the transmissions of the current day (from 6:00 to 6:00 on the following day).</p> <p>The title line gives the date to which the programme summary refers. To the right of it one can see how many days the total information covers and which day you have directly activated.</p> <p>If you want to change to the next day, go to the end of the list and press P+ or P-. In order to change to earlier days you go to the beginning of the list and press + or -.</p> <p>Note: If you have selected a transmitter (even for the first time) it can happen that the data in the list will be supplemented, while you navigate.</p>
Daily summary detailed view	To acquire additional information on a transmitter in the list press OK, to call up the detailed summary. In the detailed summary you can proceed to the previous or next transmitters with the +/- buttons.

Note:

Not all providers use the EPG features. Some don't broadcast any information at all, some do send basic information only, but no programme guide for future days and some others use a special encoding of information, so the EPG will be available to special decoder boxes only.

Enjoy the information available and contact your TV provider if no information is given at all, to ask him when he will activate this feature.

Please note, that you need to install the correct time zone to get the EPG information correctly shown (Section "Basic settings" on page 12)

Selection of the audio/radio channels

In order to select an alternative audio channel in TV operation with multilanguage programmes, open the context menu in the current programme through the MENU button.

If the selected channel provides a multilanguage audio transmission, this information will appear in the context menu with the sub point “Audio channel”. Select this with OK to see all provided audio streams, select the desired one if multilanguage is available and select with OK.

Sometimes no speech recognition is provided, so you will need to try out the different streams given to find the language you want to get.

Radio channels

Sometimes but not very often a radio broadcast is hidden as a multilanguage audio transmission with a TV channel. So feel free to find out if this applies to any of the TV channels you can receive.

Regularly radio broadcast is being marked as such and so it will show up in the regular channel list as soon you press the RADIO button on your remote.

Games

For your pleasure, some simple but well known games are incorporated in the menu point “Extras” in the main menu.

Select the game you want to play, activate it with OK. You can abort any active game any time with the EXIT button.

Game controls are OK, P+, P-, VOL+ and VOL-

Configuration of the receiver

Basic settings

The basic settings of the receiver will be taken from the submenu “Edit settings” in the main menu. Arrive there by pressing the MENU button twice.

Use the +/- buttons in order to change the individual options in the sub points of the “Edit settings” menu.

Providing the particular option provides for selection from a value list, this list can be displayed with the OK button. With numerical values, directed inputting is possible with the number buttons.

Please also note for the individual points the help insertion on the screen.

Settings which have changed since the last storage will be given in **green colour**.

Once you have made the changes, you must store them. Go to the “Edit settings” menu on the point “Save settings” and then press OK. Wait until the menu disappears - only then the storage procedure has been completed. This can, according to circumstances, last for several seconds.

Edit settings → General

Time zone: Here set your time zone in relation to the world time (Greenwich Time, UTC). This is necessary, because the time transmitted by the transponder operations always relates to UTC, according to the world wide DVB-S standard.

Operating language: Here you can set your preferred language. All OSD inserts then show up in this language. A change is only activated through the menus. The EPG text will naturally be generally displayed in the language, in which the provider has transmitted it.

Search for scrambled (encrypted) channels: Here you can select whether the automatic search procedure should be carried out for an encrypted channel and this one should be displayed in the list. A reproduction of picture and sound from an encrypted channel is only possible with the correct CA module inserted into a CI slot of the decoder and a valid smart card applied to the CAM.

Edit settings → OSD / EPG

Status insert duration: Establishes how long the status display with information on the current programme stays on the screen following a programme change.

Channel number – Timeout: Establishes for how many seconds a programme changeover will be the accepted through a number input, if this is incomplete.

OSD Transparency: Set the transparency of the OSD inserts, as well as the strength of the picture so that it should appear through the OSD.

Help text: Here the inserting of the Help text can be completely switched off.

Shortened Help with OK: If this topic is activated, a short HELP page is inserted with the pressing of the OK button. Otherwise the status panel will display the programme information (Default).

Edit settings → Satellite system

With this topic you will acquire a list of all the satellites known at the time being in the area this equipment has been made for.

As an advanced feature you are able to mark one or several of the satellites as being “inactive”, so no channels transmitted on the inactive satellites will show in the channel list.

It is highly recommended not to alter the settings given here without the detailed advice of your dealer. Misuse of these settings can result in virtually malfunctioning equipment. Efforts needed to restore false settings are not part of the warranty.

Once a new satellite appears in space, this list will be updated and made available through your dealer, who will be happy to install an upgrade to your equipment if necessary.

Edit settings → Reproduction

Television: Select 4:3 unless you’ve got a wide screen 16:9 TV set.

Video format TV / VCR / VCR-In: With RCA connections it is recommended to set all topics to “CVBS”. For TV-out you may select “RGB” as well..

Volume – Bypass: Defaults to “None” and should not be modified.

Edit settings → Save settings

Activate this topic to make any changes to the setup permanent.
If unsure just switch to standby to discard any changes made.

Preparation of the channel list

You can change the channel list of the receiver in accordance with your own ideas. We highly recommend that the channels are grouped according to satellites, as they are in the pre-installed channel list.

Call up the channel list editor through the menu point “Channel list / Sort channels” in the main menu.

Once you have completed the required changes, leave at the transmitter list with EXIT. Confirm the subsequent question with OK in order to store the channel list. To discard any modifications you have made confirm with SWAP.

In order to change an entry, you must select an entry in the list, then press OK. Then appears a menu with the available functions.

If you want to work on a complete block of one after other channels, select the option “Block marking” in the menu. In this case the menu disappears and you will be required to mark the end of the block in the list. Go to the last entry which belongs to the block and press OK. Then the menu with the available options will be inserted.

The following are functions are available in the menu:

Copy	Copy the transmitter in another position of the transmitter list. The target entry will be deleted.
Move	Move the entry to another position. Note: if you move an entry upwards, it will appear in front of the target entry. If you move it downwards, it will appear behind the target entry.
Delete	Deletes a transmitter from the transmitter list. The entry will be marked in the list as unused. This leaves the numbering of the other transmitters unchanged.
Cut out	Deletes a transmitter from the transmitter list. The following transmitter returns to the vacated position. Note: In order to maintain the blocking of the transmitters all the transmitters only return to the next entry marked “unused”. If the list of entries from 85 to 99 are not occupied, you can for example delete entry 57 and only return transmitters 57 to 84. The transmitters from 100 remain unchanged.
Free insertion	Only inserts an empty entry. The following transmitters return correspondingly to the rear. Note: As with “Cut out” this operation sends all the transmitters marked “unused” to the end of the block.
Packing	This option is only available, if you have marked a block. Within this block all the gaps with entries marked “unused” will be moved as transmitters are inserted above. The empty entries are then to be found gathered together at the end of the block.

With the functions concerned with a target entry, following the selection of any menu point, you will be required to select the target entry. You do this, by going to the entry in the list and confirming with OK. Providing you have not completed a function, you can return to the previous step with the EXIT button.

Search procedure

The automatic search procedure of the receiver searches for any satellite in accordance with a new programme. Programmes which are already entered in the transmitter list will automatically update the changes. Coded transmitters will operate according to guidelines.

To carry out a search procedure

1. Call up the search procedure through the main menu in sub point “Transmitter list/ Transmitter search”.
2. Select from the satellite list that you wish to search for and confirm with OK.
3. Wait until the end of the search procedure. The displayed information is the technical detail of the searched for transmitter. The “Total” field gives information on the free programme that has been found.
4. When the search procedure has ended, the channel selection window will be inserted.

Channel selection window

This window contains the transmitter list on the left and on the right the new channels. In order to change between the TV and radio transmitters that have been found, please press the TV or Radio button. To change between the lists use the SWAP button. The various functions are available for you. In order to call these up, move the selection first to the channel which you want to change, then press OK and select in the presented menu the required option.

With operations in which there is an insertion of the transmitter entry, change the selection in the left window and you will be required, to select the target entry from the list with OK.

For the found transmitters that you have found (right list) the following options are available:

Activate	View channel
Copy before	Copies the selected new transmitter into the transmitter list before an existing entry. This entry and the following one will be pushed downwards to make space for the new one.
Copy on	Copies the selected new transmitter in the transmitter list on an existing entry. The old entry is therefore written over.

Look at the existing transmitter list in the left column. You can switch the preparation of this list with the SWAP button. Available here for you are the following menu options:

Activate	View channel
Return	With the transmitters, which have been found again by the search procedure, you can use of this option to prevent their updating. Re-found transmitters will be shown in the transmitter list in green.
Cut out	Deletes a transmitter from the transmitter list. The following

	transmitter returns to the vacated position.
Delete	Deletes a transmitter from the transmitter list. The entry will be marked in the list as unused. This leaves the numbering of the other transmitters unchanged.

Saving the transmitter list

Once the new transmitter has been inserted in the transmitter list in accordance with your wishes, press EXIT. Then a dialogue appears in which you can select, whether you wish to store the change (OK button), or if you wish to reject it (SWAP button) or whether you again wish to return to the channel selection window (EXIT button).

If you reject your changes (SWAP button), the original transmitter list remains unchanged and all your changes will be lost.

Signal strength indication

You can call up the signal strength indication in the submenu “Extras” of the main menu. You can assess the signal strengths from the presented vertical columns. The C/N value gives the same values in dB.

The three coloured fields associated with the columns give information on the status of the various stages of the receiving components. Only if these three fields are green, will applicable data from the signal be acquired and only then can a picture be presented.

Note: The signal strength depends not only on the setting of your receiver unit, but also on the directly activated channel. Take note of this, if you, as a result of the signal strength indication, check the alignment of the antenna.

Note: The same indication will also be inserted in the menu “Oyster Digital → Manual search.

Operation with additional satellite receiver

If you wish to operate an additional satellite receiver on the same antenna as the Digital receiver, connect the signal from the IF-OUTPUT of the Digital receiver to the antenna input of the second receiver.

So that this procedure functions correctly, only one of the two receivers may control the LNB voltage of the antenna. In order to ensure this, the unused equipment should be switched off. It is sufficient to put the Digital receiver into the standby mode.

So that the automatic satellite finding of the Oyster Digital can function without problem, during the search no interruption of the signal is to take place. Therefore the second receiver must be switched off during the fully automatic search or the local search.

Please note, that you cannot receive with both receivers at the same time - should you require this, the option "Twin-LNB" is recommended. In this case a special LNB (receiver head) with two outputs is mounted in the Oyster external unit and two antenna cables will be used.

The Oyster Digital Functions

You reach the “Oyster Digital” menu by pressing the MENU button and then selecting the point “Oyster Digital” with P+/P-. The Oyster Digital menu is opened by pressing OK.

You can select the individual points as normal with P+/P- and OK. All the search functions and the necessary associated settings will be carried out through the Oyster Digital menu. Many functions will also be carried out fully automatically, if this increases the ease of operation for you.

Therefore directly after the switch-on of the equipment the antenna is automatically opened and moved to the last receiving position. If no picture can be received, then there is an automatic start of the fully automatic search.

On the switching off of the equipment with the red standby button or the buttons on the indication unit the antenna automatically closes, as well as the antenna retracting if you switch on the ignition of your vehicle in order to start the motor. Naturally the retraction of the antenna lasts a few seconds. Never travel until the antenna is fully retracted.

Before moving off generally check with a look at the vehicle roof for the correct storage position of the antenna. The indication unit should only display a green standby point or be fully dark.

A further fully automatic comfort function of your Oyster Digital is the automatic realignment of the antenna to another (at the time) selected satellite, if you switch to a programme which is transmitted from another satellite. Therefore all the receivable satellites are available for you at any time. The only thing you have to do is change the programme.

Fully automatic search

The fully automatic search is directly started through the selection of this menu point, unless it has otherwise already started following the switch-on, if in the last receiving position no picture can be evaluated (e.g. following vehicle movements or a change of location). The satellite search is carried out in accordance with the LEM principle (Last Elevation Memory) and begins in the angle position of the last receiving position. In general the receivable satellite will be found relatively quickly, as often between the old and new location no great distance exists.

If since the last location of the vehicle a long run has been completed, it is generally advantageous in time (search time shortening), to select the "Local search".

The satellite, for which the fully automatic search has been used, can be pre-set under **Oyster Digital → Configuration → Satellite search.**

Local search

With the selection of this menu point you open a submenu for the selection of various countries or areas. Using it the P+/P- buttons (lines) or +/- (pages) an entry can be selected and then activated with OK.

This will arrange for the regionally differing angles of the receivable satellites. The resultant satellite finding is then reduced in time. This search function is of special interest; particularly if there is a long distance between your old and new locations.

If you have pre-set a satellite under **Oyster Digital → Configuration → Satellite search which** now cannot be found at the selected location, the equipment automatically selects a satellite as the search satellite, which was principally received at your location of the time (mostly Optus C1).

You will be shown on the screen which satellite has actually been used for the search. Following the successful finding of the satellite there will be an automatic switching to a programme which is actually being transmitted by that satellite.

Please note that not all satellites can be received in all places. If you are not sure whether your pre-set search satellite can really be received at your current location, use the local search. In this case the Oyster Digital will automatically select a receivable satellite.

Manual search

With the selection of this menu point you open a menu with your oyster which can be manually controlled or adjusted. For this first go to a receivable programme at your location, as otherwise you cannot receive a picture. (See Transmitter List Appendix and Search Satellite Appendix on page 33).

With the manual search, for example, one can manually optimise the antenna position or can control the new satellite. The menu shows the rotation and the angle in degrees relative to your vehicle as well as the signal strength. The strongest signal presents at the same time the best picture quality. The signal strength varies however according to the programme and the location. To receive a picture you need 3 green indicators (DVB, FEC and QPSK) as well as a C/N value of at least 6 or higher in the signal strength window.

In order to move the antenna put the light column with P+/P- on Azimuth (rotation, direction) or Elevation (angle). Using the +/- buttons the antenna can be moved in steps in the selected direction. You will see in the direction indication window the corresponding change, which you have called up in the antenna direction. Please note, that the indicated direction value relates to your vehicle and to no actual degree information (space direction) - which once you have moved your vehicle will no longer have any validity!

If you wish to manually control the antenna over a greater range this can be increased steps. For this simply press a number from 1 – 9 on the remote controller, while the light selection column stands on Azimuth or Elevation. The selected step size will be presented in the direction indication window behind the degree number. For this applies: the greater the number, the greater the extent of the step. For the fine adjustment of a position to be possible you must select a step of 1 or 2.

In order to store the current set position select the point “Store position” and press OK. The current position will now be immediately stored. If you now retract / switch off, the unit will automatically return to this position. If you had a picture at the “Store position” and the vehicle does not move, then when switching on again within a few seconds you will receive a picture.

As a further facility you can retract the antenna at any time from the “Manual search” point - for this you move the light column and press OK. The antenna now retracts. You can achieve this in the direction indication window. At an elevation of approx. -73° the antenna is mechanically fully retracted - the equipment however does not now switch itself off. By selecting the point “Last position” and then pressing OK the antenna travels to the stored position. This can for example be used if you have previously retracted the antenna and must now re-open it.

In order to leave the “Manual search” menu you can press EXIT at anytime.

Retracting and switching off

This function switches the antenna and switches the receiver into standby.

The same function can be carried out by pressing the red standby button on the remote controller or with a longer pressure at the same time on the two buttons on the indication unit.

The standby condition will be indicated with a green point on the indication unit, unless under Oyster Digital → Configuration → Standby mode the setting “Comfort” is selected (see page 28).

Video – Operation

With the selection of this point the antenna is retracted and the signal from the video recorder is passed through to the television. For this your video recorder must be connected to the upper (VCR) Scart socket of the Oyster Digital receiver.

Video operation is also possible with an extended antenna - in this case you must merely press the AV button, in order to pass the signal from the video recorder to the television.

With very strong wind it is recommended that you retract the antenna for the video operation. With switched off equipment (standby) no video operation is possible!

Configuration

Using this menu point the various settings for the operation of the Oyster Digital can be carried out. All the automatic search functions relating to settings are carried out here.

Stand-by mode: The “Comfort” setting permits you to switch the equipment on again with the remote controller (red button) if it has been switched into standby. This readiness position during standby will be indicated by a small green point in the display.

The “Power saving” setting switches in the standby situation also for the remote control receiver and the display of the green light point. In this case the switching on again can no longer be carried out with the remote control, to switch on the two buttons on the indicator unit must be pressed for a short time only.

Search satellite: Here can be selected which satellite the equipment should proceed with following the switch-on for the fully automatic search or the local search. There are various satellites to choose from covering the various areas and language programme ranges. Please note, that not all satellites can be received everywhere! (See Search satellite appendix, page 33).

Automatic satellite change: The “Active” setting checks on a programme change whether the newly selected programme is transmitted by another than the currently received satellites. If such a satellite change is recognised the equipment will automatically travel to the new satellite.

The “Off” setting deactivates the automatic satellite change. This can be necessary, if the automatic satellite change does not function due to the weaker signal and you want to use the manual search. (See manual search, page 26).

LED rotation display: The “Yes” setting ensures, that the channel number is indicated in the display standing on its head. This is of use, if the external indication unit is mounted with the buttons “hanging” downwards. This means that the channel number will again be normally readable.

The “No” setting is intended for a “normally” mounted display, with the buttons pointing upwards.

Automatic satellite changeover

Your Oyster Digital is in a position, to automatically switch at all your locations between the receivable satellites, without you having to be particularly involved.

For each programme position stored in the transmitter list is also stored the satellite, which transmits these programmes (see Transmitter list appendix, page 33). If the Oyster Digital recognises a satellite change while following a programme change carried out by you, the antenna immediately searches for the satellite and aligns itself exactly on the signal. You will see during this time in the status indication the report **“Antenna rotating”**.

If the selected programme cannot be found on the new satellite (e.g. because at the time it is not transmitting or it is to be found outside the receiving area), the antenna returns to the satellite, from which the search started and switches on a programme of that satellite.

The time which your equipment needs to carry out this change is strongly dependent, on how far the two satellite positions are apart from each other. A change between Optus C1 and Optus B3 can e.g. take place in less than three seconds, if the satellite positions are known. Should the exact positions not be known, the change lasts a little longer.

This function can be broken off during the travel to a new satellite or during the search for a new satellite at any time with the SWAP button.

So that this function can be correctly carried out, there must be a switching to **“Active”** under **Oyster Digital → Configuration → Automatic satellite change**. In order to use the manual search there must be a prior switching to the function “Automatic satellite change” in the Configuration menu and “Off”, as the equipment otherwise will always automatically return to a known satellite in order to be able to receive a picture.

Problem indication

Problems can occur during the operation of the automatic antenna unit if e.g. the freedom of movement of the antenna is not guaranteed (branches, snow, etc.).

The type of interference will be automatically recognised and presented on the external indication as a fault code.

Display	Fault description	Interference elimination
E 01	No satellite signal could be found.	Change your location. Do you have a free view to the North? Are you in the receiving area of a satellite?
E 02 E 03	Dish blocked in the rotation direction / elevation direction	Is an object projecting into the movement area of the antenna? Is the supply voltage too low (weak battery)? Switch the equipment off with the MUTE button (hold down for 3 seconds) and then switch on again.
E 04	Dish cannot completely retract and switch off	Press EXIT to close the antenna again. Remove snow, leaves or other objects from the storage hollow in the antenna body.
E 05 E 06	Top box does not respond after the switch-on or does not react to commands	Is the red (10Amp.) fuse OK? Are all the cables correctly inserted?
E 07	Short-circuit in the antenna cable or LNB	Check the white antenna cable and the plug.
E 08	No or low voltage for the top box	Check the fuses on the rear side of your receiver.
E 09	No LNB connected or LNB out of order	Insure that the white IF lead is properly connected to the receiver, the top box and the LNB. In rare cases your LNB might be faulty as well.
E10, 11, 12	Voltage drops occur while dish is moving	You should charge up your battery ASAP. This is a warning only.
E 15	Faulty response from top box	The interconnection from decoder to top box could be weak and should be checked.
E 16	Model configuration fault	The internal configuration of your decoder does not match to Australian conditions. Contact your dealer for assistance.
E 17	Re-initialisation performed	One or more memory errors have been fixed automatically. Please restart your decoder.
E 99	Buffer overflow	Switch the main switch to OFF, wait for 10sec and switch ON again to restart the decoder

Use of the RS232 interface

The serial R232 interface of the receiver offers the facility for the connection of a PC. Contact SmartSat for software tools to use this interface from any compatible PC running a version of Microsoft windows.

Software is available for uploading / downloading and edition your channel list, for remote control of the decoder by PC instead of infrared commander and for firmware upgrades.

Do not use any prepared firmware upgrades other than those from SmartSat. The use of prepared software updates which are not from us can damage your Oyster Digital and will void warranty.

For the connection of the receiver to a PC you require a serial cable with 1:1 Pin arrangement. That is all pins will be directly connected. On the PC side the cable has a 9 or 25 pole D-SUB socket, intended for the serial connection of your PC. A 9 pole D-SUB plug is required on the receiver side. A “mouse extension cable” is supplied in this form and can be used.

The receiver socket is occupied as follows:

1, 4, 6 – 9	Not occupied
2	TXD
3	RXD
5	GND

Technical data of the decoder

IF Part (Front End)

Input frequency range	950... 2150 MHz
Input level range	-65 ... -25 dBm
Input impedance	75 Ohm unsymmetrical
Signal modulation	QPSK
Signal Input socket	F-Std., female

Signal decoder

Supported Symbol rates	all > 10000 MSym/sec
Fault corrector (FEC)	Viterbi
Viterbi rates supported	1 /2, 2/3, 3 /4, 5/6, 7/8
Signal format	DVB MPEG2
Encryption supported	all standards via Common Interface

Audio/video part

Signal preparation	in accordance with ISO/IEC 13818-2
Video signal output	CVBS or Component or RGB
Audio signal output	Stereo via SCART or RCA
Audio level output	adjustable or fixed 0dB

Output sockets

Audio / Video	Euro SCART
Audio	RCA Chinch
RF-Modulator	DIN / IEC

Further data

Operating voltage	12V nominal (11-24V) DC
Receiver power consumption	ca. 11 Watt @ 13,8V
Weight	ca. 2 kg
Dimensions (WxHxD, in mm)	ca. 260 x 80 x 140

The right for technical changes reserved.

Search satellite Appendix

These satellites are pre-programmed for direct search in your Oyster Digital. The selection is carried out under **Oyster Digital → Edit settings → Search satellite** (See page 26).

In addition, some other or future satellites will transmit in the DVB standard. In any case these satellites have either a very small or continually changing programme range and because of the signal strength are often not suitable for mobile problem-free reception. The Oyster Digital, on the basis of the function “Automatic satellite swap”, is able also to receive those satellites (see page 36).

OPTUS C1

The major satellite to transmit TV and radio broadcasts to the whole Australian continent. (Austar, Foxtel and Aurora packages)

OPTUS B3

Transmits several ethnic stations from all over the world to whole Australia.

NSS 6

Transmits several stations from all over the world to selected locations throughout Australia

PAS 8

Transmits several stations from all over the world to selected locations throughout Australia.

PAS 2

Transmits an encrypted package to selected locations throughout Australia.

INTELSAT 701

Transmits several FTA channels as well as several encrypted channels in French language.

MEASAT 2

Contains an encrypted Chinese channel package.

OPTUS B1

Very old satellite transmitting a very weak signal. A stronger beam is available to Perth and its suburbs.

Channel list appendix (TV channels)

The programmes in the original channel list (TV) are arranged for the individual satellites as follows:

Optus C1	CH 001 to CH 299
Optus B3	CH 300 to CH 399
NSS 6	CH 600 to CH 699
PAS 8	CH 800 to CH 899
PAS 2	CH 400 to CH 449
Intelsat 701	CH 700 to CH 799
Measat 2	CH 450 to CH 999
Optus B1	CH 900 to CH 999
NSS 5	CH 500 to CH 599

Please note that not all programme numbers are currently assigned to a transmitter. A number of them are kept free for future expansions. Further some of the broadcasters very often switch off individual programmes. You can sort the transmitter list in any way at any time you wish or enter new transmitters with the help of the search procedure. The operation of the equipment will not be influenced.

The distribution of the radio transmitter list is comparable to the television transmitter list.

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