Satlink 2800 Satlink 2800 12V

Digital Satellite Receiver

User's Manual

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General Information Main Features

•DVB/MPEG-2 Compliant -Max. 4000 Channels TV & Radio Programmable -Max. 128 Satellites Programmable -CD Quality Sound (MPEG 1, Layer 1, 2) •Multi-Function

-Advanced Electronic Program Guide (EPG) -Full 7 days EPG With Time Reservation -Supports automatic Turn-On and Off in Timer Settings -Supports OSD/VBI Teletext and Subtitle

-Normal/Wide Vision (4:3, 16:9) -Multi Language OSD Menu -Multi Reception (PAL/NTSC) -Last channel Memory Friendly User Interface -True Color Background Image -PIG (Picture In Graphic) -Multi Picture (1 Live / 8 Still) Easy Installation -SCPC & MCPC Receivable from C/Ku-Band -Program search via automatic, advanced and manual and N.I.T (Network InformationTable) Favorite Channel List -8 Favorite Groups Compatibility - DiSEqC1.0, DiSEqC1.2 and USALS Control Compatible - Data(S/W and channel data) transferable from PC Flexibility -Program List Download through RS-232C (Receiver to Receiver, PC to Receiver)

-Software Upgrade through RS-232C (Receiver to Receiver, PC to Receiver)

For Your Satety



WARNING

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Unpacking

-After purchasing the receiver, unpack it and check to make sure that all of the following items are included in the packing.

- _ 1 x Receiver
- _ 1 x Remote Control Unit
- _ 2 x AAA Batteries
- _ 1 x RCA Cable
- _ 1 x User Manual

Remote Control Unit



POWER : Switch between the operation and standby modes. TV/SAT : Select the TV or Receiver display.

MUTE : To turn the sound on/off.

PAUSE : To select the freze function.

NUMERIC (0~9) : Alphanumeric to select channel or parameter.

TV/RADIO : Press to select the TV/RADIO mode.

AUDIO : Select the Left, Right and both sound.

MENU : For the general setting and configuration of systems.

EXIT : Press to return to the previous menu and screen.

CH UP/DOWN : Change channel and page up down in channels list of menu.

OK : Confirm or accept function or selection.

VOL DOWN/UP : Navigate in menu or adjust volume of audio.

INFO : See the TV & Radio & Favorite Channels.

Exit : Return to the previous channel or previous menu.

WHITE, RED, GREEN, YELLOW, BLUE : Color key for convenient user action.

EPG : Electronic Program Guide button displays the TV/Radio Program guide.

TELETEXT : See the Teletext broadcasting when available. SUBTITLE : Press to display the subtitle language list for the current service.

Front Panel Controls



Power Button Turn the IRD On and Off (Stand-by) mode.. Menu Button : For the general setting and configuration of systems. Ok Button Confirm or accept function or selection. Channel UP/DOWN Button Change channel up/down in channels list. Volume UP/DOWN Button Change volume up/down

LED Display Indicate program number and setting status of receiver with 4 digits 7 segment

Rear Panel Controls



1. LNB IN/OUT

LNB terminal for signals from LNB of Antenna. The power is supplied to LNB through this terminal **2. SCART**

This SCART connection provides the audio and video signals for a monitor or a television. **3. VIDEO**

This RCA provides a composite video signal for the connection to a TV or VCR/DVD recorder **4.0/12V**

0V or 12V output

5. AUDIO L/R

These two RCA jacks provide the stereo audio for an A/V amplifier, TV or VCR

6. RS-232

This terminal provides a serial data connection to data download from your PC.

Installation

Connecting to TV using SCART support



Menu Guide Channel List

- Press [OK] to display the channel list while your are watching.
- You can leave the channel list at any time by pressing [EXIT/BACK]. If you want to change channel in the list, use [P+/P-] _
- _ or [__].
- Press < > Keys to change display mode. All Satellite One Satellite _

		Channel List
•	All Satellite	
0001	TV ONE	
0002	TV2	A CONCERCE
0003	TV3	
0004	C4	
0005	Maori TV	
0006	TVNZ 6	
0007	TVNZ 7	OPTUS D1 160E
8000	TVNZ SPORT	12483 H 22500
0009	STRATOS	0001 TV ONE
0010	CUE	080
A 64		Real Provide Real
Q FI	ia = Select To Grou	p « M Page MENU Back
🥥 🥥 G	Group 🥥 Sort	

Rename

- On the RCU, press the [MENU] key. -
- -
- -
- Select the TV Channel Manager. On the RCU, press the [YELLOW] key. On the RCU, press the [YELLOW] key. -
- You can edit the selected channel name within the pop-up window -
- with numeric button and select OK to save

				~	C	V Cł	nann	el Eq	iit		-	_	
•	0	PTU	JS D	1 16	0E	,					1		
0001		-	-								_		
0002	Т					τv	ON	E					
0003	Т												1.12
0004	C	A	В	C	D	E	F	G	Н	1	J		-
0005	N	ĸ		M	N	0	P	0	R	S	T		1
0006	T			-									
0007	T	•	<u> </u>		×	Ľ	2		-		як –		
8000	I												
0009	SI	RAI	105										L70
0010	CU	E						-					Q81
\$ Sele	ect	-	Gro	up	« »	Page	E ME	NU B	ack				
🔵 De	let	e (Cr	eate		Rer	ame	0	Lock		Mo	ve:	

Lock

- On the RCU, press the [MENU] key. Select the TV Channel Manager. On the RCU, press the [Blue] key. -
- -
- -

	TV	Channe	el Edit
4	OPTUS D1 160E	•	11-Section and the section
0001	TV ONE		March Charles
0002	TV2		
0003	TV3		
0004	C4		- T T
0005	Maori TV		
0006	TVNZ 6		
0007	TVNZ 7		OPTUS D1 160E
0008	TVNZ SPORT		12483 H 22500
0009	STRATOS		0001 TV ONE
0010	CUE		L70
		_	080
⇒ Se	lect () Group (() P	age ME	NU Back
🥥 🕘 D	elete 🔘 Create 🥥 I	Rename	🔵 Lock 🔘 Move

Move

- -
- -
- -
- -
- On the RCU, press the [MENU] key. Select the TV Channel Manager. Go to the Channel you want to Move. On the RCU, press the [WHITE] key. Move the Channel to where you want it. On the RCU, press the OK key -
- -

	TV Chan	nel Edit
•	OPTUS D1 160E >	
0001	TV ONE	everyone.
0002	TV2	
0003	TV3	
0004	C4	1000
0005	Maori TV	
0006	TVNZ 6	
0007	TVNZ 7	OPTUS D1 160E
8000	TVNZ SPORT	12483 H 22500
0009	STRATOS	0001 TV ONE
0010	CUE	000
		080
⇒ Se	lect () Group (() Page	ENU Back
🥥 问 🗋	elete 🥥 Create 🥥 Renam	e 🔾 Lock 🥥 Move

Delete

- -
- -
- On the RCU, press the [MENU] key. Select the TV Channel Manager. On the RCU, press the [RED] key. and select Exit and confirm the change -

	TV Chann	el Edit
•	OPTUS D1 160E	
0001	TV ONE	
0002	TV2	
0003	TV3	
0004	C4	TONIGHT 2
0005	Maori TV	
0006	TVNZ 6	
0007	TVNZ 7	OPTUS D1 160E
8000	TVNZ SPORT	12483 H 22500
0009	STRATOS	171
0010	CUE	Q79
≑ Se	lect 🚸 Group 📢 🗰 Page 🕅	ENU Back
🥥 🕖	elete 🥥 Create 🥥 Rename	e 🔾 Lock 🥥 Move

Channel Guide

_

Press [EPG] to see Channel Guide. This guide will display the titles and start times for

programs (events) which are now broadcasting Press [RED] to switch between the now and next and schedule view

Pr	ogram Guide 02:00 27/01/2010
1. TV ONE 2. TV2 3. TV3 4. C4 5. Maori TV 6. TVNZ 6 7. TVNZ 7 8. TVNZ SPORT EXTR 9. STRATOS 10. CUE	02:00-03:00 Ellen 03:00-03:30 Te Karere
 Select (A) Page Schedule (O) Now Deta 	ail O Next Detail

Switching TV and Radio

- Press the "TV/RAD" button to switch TV or Radio.



Main Menu

Once you have properly installed and connected all cables of the receiver, the Main Menu will be displayed by pressing [MENU].
Main menu consists of submenus as below.

-Channel

- -Installation
- -System
- -Tools
- -Game
- •Some menus need the password.
- •Default password is "0000"

	Main	Menu	
0	Channel	Channel	
8	Installation	TV Channel Manager Radio Channel Manager	2
460	System		
**	Tools		
۵:	Game		
Select OK	Enter MENU Back	► Enter	

Installation

You can search for channels in this menu as well as change -LNB Type and Switch Configuration.
-Single Satellite Search.
-Multi Satellite Search.

-TP Edit.

	Installation
Satellite	
LNB Type	Standard
TP Index	1/15
DiSEqC	Dis able
Positioner	Off
22K	Off
0/12V	Off
Polarity	Auto
Toneburst	Off
LNB Power	On
Level	71%
Qualit	79%
Select 🕢 Change 🔍 Ei Single Scan 🥥 Multi S	nter EXITExit 🐗 Beep on Scan 🥥 Edit TP 🔘 Auto Diseqc

Antenna Connection

• Before searching, the satellite antennas environment should be set.

LNBs have different L.O. frequencies, you will need to make sure that this is correctly set :



Antenna Setup

• Before searching, the satellite antennas environment should be set. (LNB Local Frequency, DiSEqC1.0/DiSEqC1.2/USALS, 22khz, 0/12 volt control)

• Note 1: If you choose motor antenna at antenna connection menu, the motor type will need to be setup.

Satellite	
TP Index	1/15
Local	Manual
Local Longitude	E 0.00
Local Latitude	N 0.00
Step Move	Stop
Continuous Move	Stop
Limit setup	Disable Limit
Go to Reference	
Level	70%
Qualit	80%

Single Satellite Search

- Press > to select the parameter to change. Press [OK] to start search one selected satellite at 'Search' •

	Installation
Satellite LNR Type T D Scan Mode P Program Ty 2: Scan Type 0, Scan Type P NIT Search T LNB Power	 ◆ OPTUS D1 160E → Standard ◆ Free → * pe TV + Radio Manual Scan Off OK to Search Un
Level Qualit	72% 82%
⇔ Select ↔ Change ok @ Single Scan @ Multi	Enter EXIT Exit 🐗 Beep on Scan 🥥 Edit TP 🕥 Auto Diseqc

Multi Satellite Search

•

Press [OK] to start search selected satellites at 'Search'

	Select S	atellites		
001)	OPTUS D1 160E			E
002)	OPTUS C1 156E			
003)	OPTUS D2 152E			
004)	NSS 5 177W			
005)	IntelSat 701 180E			
006)	IntelSat701C 180E			
007)	GE 23 172E			
008)	IntelSat 5C 169E			
009)	IntelSat 8 166E			
010)	IntelSat 8 C 166E			
🔷 Change 👒	Page OK Select	MENU Back	EXIT Exit	
Search				

TP List

• Press [YELLOW] key, open edit TP menu. User can edit TP info. Frequency:"3000~13450 MHz", Symbol Rate: "1000~45000Ks/s".

• Press [GREEN] key, open new TP menu. User can add a new TP.

• Press [YELLOW] key will open dialog box asking you whether confirm to delete current TP. When select "Yes", you will delete the channel which highlight focus on. When select "No", it will cancel the operation.

• Press [RED] key will display a dialogue box. You can select "FTA Only, Scan Channel, Network Search" items, then move highlight to "Yes" button and press [OK] to begin to search.

	Edit TP	
Satellite	OPTUS D1 160E	
TP Index	◀ 1/15 ▶	
TP Frequency	12483Mhz	
Symbol Rate	22500Ks/s	
Polarity	Horizontal	
Level	71%	
Qualit	81%	
	ter MENU Back EXIT Exit	
🔴 TP Scan 🔘 Add 🥥 De	el 🔾 Del All	

System Setup

The System Setup has 8 menu items as follows.
-Language.
-TV System.
-Local Time Setting.

-Timer.

-Startup Channel

-OSD Setting.

-Parental Lock

Main	Menu
Channel	System
Installation	Language TV System
A System	Local Time Setting Timer Startup Channel
Tools	Channel Play Type OSD Setting
Game	Parental Lock
♦ Select OK Enter MENU Back	Enter

Language

• Menu Language, First Audio Language, Second Audio Language and Teletext Language are selectable.

Langua	age Setting	
Menu Language First Audio Second Audio EPG Subtitle Language	 English English English English English 	
♦ Select ↔ Change MENU Bar	ick EXIT Exit	

TV System

• Select the type of TV Signal output and TV Aspect Ration. -Press > to select PAL and NTSC. -Press > to select between 4:3 and 16:9.

-Press > to select between CVBS and RGB and YUV (Component Video)

	V System	
Display Mode Aspect Mode Video Output RF System RF Channel	PAL 16.9 YUV PAL-BG 38	
♦ Select ↔ Change MENU E	Back EXIT Exit	

Local Time Setting

Press > to select parameters to change.
-To change Time Zone, press >.
-To set GMT usage, press >.
-To set Summer Time, press >.
-To set Date/Time by manually (appropriate for NZ), GMT usage should be off

	Local Time Setting
GMT Usage GMT Offset Summer Date Time Time Display	 Off UTC+12:00 Off 2010/01/27 02:28 Off
⇔ Select ↔ Change	OK Enter MENU Back EXIT Exit

Timer Setting

•This receiver provides 8 timers.

•Press > to select one timer

-Press > to select Off, Once and Daily.

-Press > to select wakeup channel

-Press > to select wakeup date

-Press >to select on time

-Press > to select duration to go standby mode



Parental Lock

• Menu Lock determining that when users wish to enter "Edit Channel/Installation/Tools" menu, whether have to input Password or not. If the setting of "Menu Lock" is "Yes" which means user have to key in password, set "No" means unlock.

• Channel Lock determining that when users wish to play the lock channels, whether have to input the password or not. If the setting is "Yes", play the channels with lock mark will show up a dialogue on the screen and ask for the password. If the setting of "Channel Lock" is "No", the Lock function will invalid.

• New Password is used for revising password; you can input the new password in this item by using number keys directly. After you filled in 4 digital numbers, the highlight will auto skip to Confirm Password and ask you to input the new password again. If the password is correct, the screen will show up a message of "Saving Data, Please Wait...". After finish saving and draw back to "System Setup" menu, the revising is complete.



OSD Setting

to set duration (1 ~ 10 seconds) that the program information Press > • plate is displayed on the screen when you change channel.

Select A Change of Enter USU Back Sym Exit	OS	D Setting		
A Select () Change OK Enter USNI Back SVIT Evit	Subtitle Display OSD Timeout Position OSD Transparency Load Default OSD S	∢ Setting	Off 3 Bottom Off	
Select Wohange OK Enter MENO Back Exit	♦ Select ↔ Change ○K Ent	ter MENÜ I	Back EXITE	xit

Tools

•You can do some more function as below

-Information

-Default Setting -S/W Upgrade

Main	Menu
Channel	Tools
Installation	Information Default Setting
August System	Software Upgrade Contact
Game	
Select OK Enter MENU Back	< Exit

Information

•This menu displays bootloader version, main software version, and database version. •You can refer this information when S/W upgrade.

Factory Setting

• If you want to bring receiver back to the factory default condition, select Factory Default Setting and press [OK].

• The warning message will be displayed. Press [OK] to confirm.

		Default	Setting	
	Default Val	ue		
	Delete All (Channel		
Select	OK Enter ME	ENU Back	EXIT Exit	

Upgrade By RS232

• At this menu, allcode/maincode/radioback/etc can be upgrade via RS232, select "Start" and press [OK].

• During upgrade selected data, the progress bar will be display to 100%



Game

•This receiver provides games, Tetris, Othello and Snake.



Technical Specification

- LNB/TUNER
- DiSEqC1.0/1.2
- LNB Power : 13[V]/18[v] (Max500mA)
- LNB Tone Switching :22KHz ± 2KHz(0.6Vpp)
- Input Frequency : 950MHz ~ 2150MHz
- RF Input Level : -65 ~ -25dBm
- LNB input and loop through output connector : IEC 169-24 Female
- Demodulator
- Waveform : QPSK
- Symbol Rate : 1~45Msps
- Demultiplexer
- Standard : MPEG-II
- Input Data Rate : Up to 60Mbps
- Video
- Standard :MPEG-II MP@ML
- Input Bit Rate : 1.5[Mbps] ~ 15[Mbps]
- TV Standard : PAL/NTSC
- Aspect Ratio : 16:9, 4:3
- Active Pixel : 720*576 for PAL
- CVBS Output Level : 1[Vpp] ± 3[dB] at 75[_] and 1[KHz]
- RGB Output Level : 0.7[Vpp] ± 10% at 75[_]
- Audio
- Standard : MPEG-II layer 1&2
- Mode : Stereo, joint Stereo, Dual, Mono
- Band width : 20[Hz] ~ 20[KHz] at 3[dB]
- Output Level : 3.0[Vpp]max, or 5[dBm]min(@1[KHz])