

A new menu has been added to the end of the menu structure, this menu is the Advanced menu. This menu allows the user to control the individual Transport streams that are contained within the multiplex along with the Clock Direction and Clock Edge for the TS-Dock interface board.



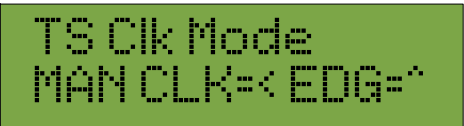
Select Advanced from the user menu.



In the Advanced menu you can select Transport stream 1 or Transport stream 2.



The Default Setting for Each transport stream Clock Mode is AUTO, this is for the use with the standard DTX1 and optional daughter board.



If you are using the DTX1 with the Optional TS-Dock board, then a manual setting can be applied to the Transport stream hardware in order to control the clock direction and edge.

In manual mode the TS Clock direction and edge can be changed as follows :

- a) Input '<'
- b) Output '>'

also between

- a) Rising edge '^'
- b) Falling edge 'v'



The Default Setting for Each Transport Stream Type is V=MPEG2 and A=MPEG1, this is for the use with the standard DTX1 and optional daughter board. On V01.00.04.06 (Beta) firmware, options here are : V=MPEG1/MPEG2/MPEG4/H264. A=MPEG1/MPEG2/AAC.



Also the TS clock for each channel can be disabled to remove that channels overhead from the multiplex, this will allow all the available bandwidth to be used on a single channel.

TS-DOCK Connector Details

P1 - TS-DOCK Bit Stream input Connector					
Pin no	Pin Symbol	Pin Name	I/O	Active	Function
24	EXT_TSCLK	TS Clock	I/O	H or L	Bit stream transfer clock. (Menu Setting)
22	EXT_STD0	Bit Stream Data 0	I	-	Bit Stream input port - Bit 0
20	EXT_STD1	Bit Stream Data 1	I	-	Bit Stream input port - Bit 1
18	EXT_STD2	Bit Stream Data 2	I	-	Bit Stream input port - Bit 2
17	EXT_STD3	Bit Stream Data 3	I	-	Bit Stream input port - Bit 3
16	EXT_STD4	Bit Stream Data 4	I	-	Bit Stream input port - Bit 4
15	EXT_STD5	Bit Stream Data 5	I	-	Bit Stream input port - Bit 5
12	EXT_STD6	Bit Stream Data 6	I	-	Bit Stream input port - Bit 6
11	EXT_STD7	Bit Stream Data 7	I	-	Bit Stream input port - Bit 7
10	EXT_DVLM	Bit stream EN	I	H	Bit Stream Enable
7	EXT_PSYM	TS Sync	I	H	Indicated the leading byte of a TS packet, Active for one CLK cycle during the TS SYNC Byte.

Settings of Bit-rates while using TS-Dock

Please always set the TS-2 (TS-Dock) Encoder System Bit-rate when using the TS-Dock, regardless of whether the TS-Clock is generated externally or internally.

For TS Clock rates, the effective Bit-rate is calculated from the Transport stream System Bit-rate, even though the TS-Clock may be generated from an external source. Setting the Transport stream System Bit-rate for the Encoders in the DTX1 menu will allow the system to track and control other bit-rates within the unit.

For DTX-1 generated TS-Clock using TS-Dock Interface Board (Internal TS-Clock)

Under this condition the TS-2 Encoder System Bit-rate will be set in order to generate the TS-Clock, as the DTX1 is generating the TS-Clock, then the bit-rate of the TS-Stream applied to the TS-2 is known.

For externally generated TS-Clock using TS-Dock interface board (External TS-Clock)

This is more important if TS-1 Encoder is active and set to AUTO for the bit-rate, under these conditions the DTX1 has to know the bit-rate of TS-2 in order to correctly manage and set the Auto bit-rate for TS-1.

Example:

If DTX1 Calculated Channel Bandwidth = 2500Kb/s

TS-1 Encoder System Bit-rate = **Auto**

TS-2 Encoder System Bit-rate= 1000Kb/s

TS-1 Encoder will be automatically set to 1500Kb/s in order to fill the bandwidth of the channel.

If TS-2 Encoder System Bit-rate is set to an arbitrary low setting and an external clock is used to supply a TS-Stream to TS-2 then the DTX1 is not aware of the actual bit-rate being supplied to TS-2. As such the automatically Calculated TS-1 bit-rate could well fall outside the maximum bandwidth available channel. If this occurs then it will generate a multiplexor overflow in the DTX1 due to there being too much data supplied from the two combined Transport Streams to fit into the available bandwidth.