

Grabbing times

One other soft key that is available for use in the QPLAY mode is the **GRAB** function found on soft key **F4**. This allows you to input cues in real time as the cue list is playing (this can be an empty cue list). To do this, press either **Fext** (**F5**) or **Pint** (**F6**) and, as the cue list is playing, press **F4** at appropriate moments. This will input empty cues at the end of the cue list. You may edit these and assign the relevant programs, MIDI notes and velocity levels in EDIT and pressing SORT in EDIT will place them in their correct chronological order. This method of inputting cues is well suited for creating cue lists 'on the fly' - that is, watching the visuals whilst entering cues in real-time. You may use this function to add cues to an existing cue list or to create a cue list 'from scratch'.

Another way to do this is to use the numeric keypad whilst the cue list is playing. This will insert programs 1 to 9 in realtime as the cue list plays according to the key press and you will hear the sound as you do this. Naturally, it is important that your programs are numbered correctly 1-9 if you are to achieve the right results using this facility. Also, if no programs are assigned to any keys that are pressed, no input will be made.

The keys will normally insert the appropriate program on MIDI note C3 with a velocity of 127 but this may be changed by changing the parameters set in the TRANS page of the main MIDI mode (please refer to Section 3 - MIDI - for more details on this function).

For either way of inputting cues in real-time, the **GRAB** soft key has two functions. If you press **GRAB** while the S1100 is NOT playing, a 'G' appears at the top of the screen next to the 'time' field. When this is displayed and any of the PLAY functions are used, you can input cues in real-time (using the GRAB function or by 'playing' the programs from the keypad) but the cues will not be displayed as you input them. This allows a far faster response time for 'grabbed' cues. You may still input cues in real-time using either method without pressing **GRAB** first and you will see the cues entered as you 'play' them but please note that the response time is slightly slower because, as the screen display changes, so some of the S1100's execution speed is used up and it is possible in such a situation, especially when inputting really fast cues, that some cues may be missed. It is recommended, therefore, that you press GRAB before putting the S1100 into play if you need to input a very fast series of cues in real-time. If you wish to cancel the 'G', press **STOP** (**F9**) and this will put you back to the normal GRAB modes.

You may not access any other fields in this mode as these are for display only although the cursor wheel and the numeric keypad can be used to scroll through the cue list. If you wish to edit the cue list, press **F2** to return to the EDIT screen.

SMPTE page

This page is where you set up the parameters for the S1100's internal timecode reader/generator. Pressing **F3** - **SMPT** - will give you this display:

SMPTE	H	M	S	F	f/s	
receive time:-	:	:	:			
transmit start:-	00:00:00:00.0				25	
current transmit:-	:	:	:			
	r trans					
PLAY	EDIT	SMPT	RCVE	STRT	CONT	STOP

The **receive time** field shows the current time being fed to the timecode reader from an external source. It will also detect the frame rate used on the external source and this is displayed underneath the **f/s** field shown in the top right hand corner of the screen.

The **transmit start** field allows you to set the time at which you want the SMPTE time to start. To the right of this field is another that allows you to set the frame rate for the transmitted timecode and the options are 24 fps (SMPTE film), 25 fps (EBU for PAL and SECAM), 30 fps (SMPTE for mono NTSC and audio-only) and 30 drop fps (SMPTE for colour NTSC). It is important that this be set to match incoming external timecode otherwise you may find that certain cues 'misfire'.

The 'current transmit' field shows the SMPTE time currently being sent.

There are four soft keys associated with the reception and transmission of SMPTE. These are:

F4 - RCVE

This switches the S1100's reader/generator to receive external SMPTE/EBU timecode. When this is switched on and external timecode is sent to the S1100, the 'receive time' field shows the current external timecode position and the 'f/s' field shows the the external timecode's frame rate.

F5 - STRT

This generates timecode from the S1100's internal generator from the point set in the **transmit start** field.

F6 - CONT

This generates timecode from the point at which the timecode transmission was stopped.

F7 - STOP

This stops transmission of timecode from the S1100's internal generator.

Saving cue lists

You may save a cue list and its programs and samples by selecting ENTIRE VOLUME as the save type - this will save all the programs, samples and effects file associated with the cue list to disk.

It is also possible to save any number of cue lists to disk. To do this, go to the DISK page and select CURSOR ITEM ONLY. Place the cursor on the cue list file you wish to save press **F2** - **SAVE** - and then press **F9** - **GO**. This will save the cue list to disk and the suffix 'Q' will be shown alongside the file. Any number of cue lists can be saved to a disk although only one can exist in the S1100 at any one time.

Loading cue lists

When a disk is inserted into the S1100's disk drive on power up, the cue list file will be loaded along with the the programs and samples. This also applies if ENTIRE VOLUME is specified as the load type.

Loading an individual cue list is done by going to the DISK and selecting CURSOR ITEM ONLY and placing the cursor on the cue list file you wish to load. Pressing **F9** - **GO** - will load the selected cue list into the S1100.

APPENDICES

The following pages contain information that, while not essential to the operation of the S1100, nonetheless may be useful as reference.

Technical Specifications

Display	Backlit 320 characters/240 x 640 graphic LCD	
Diskette drive	3.5" dual density drive, 2Mbyte capacity (2HD), 1Mbyte capacity (2DD)	
Size (maximum dimensions)	483 x 133 x 425(mm) (19 x 5.25 x 16.75(in)) (W x H x D) (EIA 3U size)	
Weight	10.1kg (22.2lbs)	
Power requirements/consumption	120VAC, 60Hz (USA, Canada) 220 - 230VAC, 50Hz (Europe, except UK) 240VAC, 50Hz (UK, Australia)	
Sampling rates	44.1kHz, 22.05kHz (20Hz-20kHz, 20Hz-10kHz audio bandwidth)	
Data format	16-bit linear encoding	
Memory	2Mbyte standard, expandable to 32Mbyte	
Sampling time (unexpanded memory)	23.76 seconds — mono @ 44.1kHz 47.52 seconds — mono @ 22.05kHz 11.88 seconds — stereo @ 44.1kHz 23.76 seconds — stereo @ 22.05kHz	
Maximum number of samples	200	
Maximum number of programs	100	
Pitch shifting	±2 octaves (1 cent steps) interpolation and decimation 24-bit algorithm, using custom VLSI circuit	
Filter	Digital moving low-pass filter (-18dB/octave)	
Envelope generators	2 x digital ADSR	
Connectors		
REC IN	2 x XLR (balanced) 2 x 1/4-inch phone (balanced)	
STEREO OUT	2 x 1/4-inch phone (unbalanced)	-5dBm, 600Ω
AES/EBU OUT	1 x XLR (AES/EBU digital audio output)	RS-422 level
ASSIGNABLE OUTS	8 x 1/4-inch phone (unbalanced)	-5dBm, 600Ω
EFFECT SEND	1 x 1/4-inch phone (unbalanced)	-5dBm, 600Ω
HEADPHONES	1 x 1/4-inch stereo phone	
SMPTE IN/OUT	2 x 1/4" phone (balanced)	
FOOTSWITCH	1 x 1/4-inch phone	
MIDI	IN, OUT, THRU	
REC GAIN	HI -56dBm, MID -38dBm, LO -18dBm	
OPTIONS		
EXM005	2Mbyte memory expansion board	
EXM008	8Mbyte memory expansion board	
1B-104	AES/EBU digital interface	
BL1000	3.5 inch blank diskettes (MF2HD)	
For details of internal hard disks, please consult your AKAI dealer		

MIDI IMPLEMENTATION CHART for S1100

FUNCTION		TRANSMITTED	RECOGNIZED	REMARKS
Basic Channel	Default	x	o 1	without disk
	Changed	x	o 1 - 16	memorized (disk)
Mode	Default	x	Mode 3	without disk
	Messages Altered	*****	Mode 1-4 OMNI On/Off, P/M x	memorized (disk)
Note Number:	True Voice	x	24 -127	
		*****	24 - 127	
Velocity	Note On	x	o 9n V=1-127	
	Note Off	x	o 8n V=1-127	Release Velocity
After-touch	Keys	x	x	
	Chs	x	o	
Pitchbend		x	o	0-12 semitone steps (8-bit resolution)
Control Change	1	x	o	Modulation wheel
	7	x	o	Volume
	64	x	o	Sustain pedal
	67	x	o	Soft pedal
Program Change	True #	x *****	1-128	by Preset number value
System Exclusive		o	o	AKAI ID 4'h S1100 48h **
System Common	Song Pos	x	x	
	Song Sel	x	x	
	Tune	x	x	
System Real time	Clock	x	x	
	Command	x	x	
Aux Messages	Local On/Off	x	x	
	All Note Off	x	o (123)	
	Active Sense	x	x	
	Reset	x	x	

MODE 1: Omni On, Poly
MODE 2: Omni Off, Poly

MODE 3: Omni On, Mono
MODE 4: Omni Off, Mono

*1 Full details of System Exclusive data formats can be obtained by contacting your AKAI dealer.

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