COUNTY OF LOS ANGELES **DEPARTMENT OF HEALTH SERVICES**

HARBOR-UCLA MEDICAL CENTER

SUBJECT: CLINICAL ALARM SYSTEMS **POLICY NO. 472**

PURPOSE:
To improve the effectiveness of clinical alarm systems in all clinical areas and provide a safe environment for patients by implementing regular, preventative maintenance, testing, ensuring that **all** alarms are activated with appropriate settings, and are sufficiently audible with respect to distances and competing ambient noise within the unit.

DEFINITION:
Clinical Alarm/Clinical Alarm System: Any alarm that is patient generated or activated and is audible and/or visual and notifies that a patient's immediate physiological or health status are, or could be life threatening. The alarm is intended to protect the individual receiving care or alert the staff that the individual is at an increased risk and needs timely assistance. Alarm examples include: cardiac monitors, apnea, elopement/abduction, infusion pumps, ventilators, or emergency assist.

POLICY:
1. Harbor-UCLA Medical Center care will be given to ensure that all clinical alarms are maintained and monitored regularly.
2. Alarms identified as high-risk will be immediately investigated for cause and reported if indicated.
3. All patients that require monitoring are to be monitored according to individual area/unit policy.
4. When set appropriately, a high-risk alarm will alert the nurse to a potentially dangerous change in a patient's condition. Conversely, inappropriately set alarms contribute to noise and stress that may distract the nurse unnecessarily from patient care. The alarm **(See Appendix 1)** will function as a resource for adjusting alarm parameters.
5. Alarm limits may require adjustment to individualize patients for the condition so that adequate physiological heart rate (ECG), oxygenation or pressure alarms do not excessively set off and/or trigger false alarms.
6. Nurses may independently adjust alarm parameters according to this policy along with patient specific parameters ordered by the provider.
7. Alarm triggered recordings are to be set for ECG only; other parameters may be recorded manually.

EFFECTIVE DATE: 10/04 **SUPERSEDES:**
REVISED: 2/06, 12/15, 11/19
REVIEWED: 2/06, 12/07, 9/10, 3/13, 12/15, 11/19
REVIEWED COMMITTEE:

APPROVED BY:

Kim McKenzie, RN, MSN, CPHQ
Chief Executive Officer

Anish Mahajan, MD
Chief Medical Officer

Nancy Blake, PhD, RN, NEA-BC, FAAN
Chief Nursing Officer

PROCEDURE:

I. Inspection, Testing and Maintenance

A. The Biomedical Electronics staff will inventory, inspect and safety check all new medical equipment prior to use on a patient. Medical equipment not owned by Harbor-UCLA Medical Center is also inspected prior to use on a patient. The evaluation of new equipment includes a determination of the processes that will be used to test, inspect and/or maintain the equipment. These strategies include:

1. Inspections based on manufacturer's specifications.
2. Equipment with clinical alarm systems are on a regular preventative maintenance schedule, which includes testing of the alarm function, setting of alarm parameters, range and volume. The Biomedical Electronics staff shall track and keep records of the inspection, testing, and maintenance of all medical equipment.
3. Malfunctioning equipment must be taken out of service and reported to Facilities Management at ext. (424) 306-8501 (M-F 7:30 a.m. to 4 p.m.) at pager (310) 501-2848 (all other hours). Staff should label the equipment with work order number, date placed, and problem to prevent others from using equipment and indicate exactly what is wrong with the equipment from their perspective. Under no circumstances shall malfunctioning equipment be used on a patient.

B. Equipment with clinical alarms will be assessed for patient risk and assigned a risk category when new equipment arrives as follows:

- **High:** Failure of equipment and/or unattended alarms may pose significant injury or death to patient.
- **Moderate:** Failure of equipment and/or unattended alarms may pose injury or adverse effect to patient.
- **Low:** Failure of equipment and/or unattended alarms may pose little risk to patient.

C. Facilities Management staff shall test and otherwise verify proper operation of the panic alarms and medical gas alarm panels on a scheduled basis.

D. Facilities Management shall be responsible for maintaining a master inventory of all devices with clinical alarm features and functionality.

E. Biomedical Electronics staff shall test and document the proper function of clinical alarms on equipment as a component of scheduled inspections as defined within the Medical Equipment Management Program, as well as upon completion of any device repair.

II. Orientation and Training of Equipment Users

A. Each new staff member of Harbor-UCLA Medical Center will receive an introductory orientation to the equipment they will use.

B. Alarm response training will include:

1. Proper use and settings of user selectable alarm settings
2. Review of differing alarm sounds and required actions
3. Prioritization of alarm response and patient risk
4. Policies related to alarm settings

III. Responsibilities:

A. When a nurse is assigned to a patient, the nurse is responsible for all relevant alarms being turned on and audible and that the alarm limits are individualized appropriately for the patient. Limits are set to default/functional settings or can be adjusted as specified in **Appendix 1**.

B. All licensed nurses and respiratory staff working with alarmed equipment will:
   1. Be familiar with pre-set parameters.
   2. Check the equipment before each use to assure the proper alarm limits are set.
   3. Respond and investigate all high-risk alarms immediately and assess patients accordingly. Nurses may adjust alarm parameters according to this policy along with patient specific parameters ordered by the provider.

IV. Use of Equipment with Clinical Alarm Systems

Clinical alarms must not be disabled except where allowed to reduce noise based on low risk of alarm and as specified in alarm appendix.

Patient care staff will check all equipment with clinical alarms to ensure:

- Settings are appropriate for each patient
- Alarm is active, functional and audible
- Alarm is sufficiently audible to all unit staff with respect to distance and competing noise within the unit
- All caregivers and equipment users shall be responsible for proper use, response to, and management of clinical alarm systems commonly used in their assigned work areas.
- Patient care staff should respond to activated clinical alarms as follows:

Risk Category	*Response Time*
High (requires immediate attention)	< 1 minute
Moderate (requires prompt attention)	1-3 minutes
Low (requires attention)	3-5 minutes

V. Assessment

A. Patient care staff responses to clinical alarms will be assessed during regularly scheduled Safety Audits.

B. Issues from the Safety Audits will be followed up with actions to improve system responsiveness.

C. Facilities Management will collect data of periodic maintenance and repair of equipment with clinical alarms.

VI. Quality Assurance/Compliance Monitoring

A. Facilities Management will submit a preventative maintenance and repair report for all devices to the Environment of Care Committee quarterly.

B. Nursing will conduct a quarterly Safety Audit of staff response to alarms and appropriate alarm range settings. Audit results will be shared with the Environment of Care Committee.
C. The Environment of Care Committee will monitor compliance with this policy.

Revised and Approved by:
Medical Executive Committee on 11/2019

Janine R. E. Vintch, M.D.
President, Professional Staff Association

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
HR/Cardiac	Varies per pt. Normal:60-100		Yes- ON	Can silence but not disable	Dependent on pt's baseline	NSG/MD depends on patient	When parameters exceeded alarm audible @ level 9		Q shift & PRN	H=120/L=60		High
							* CENTRAL STATION					
	STEPDOWN	50-120					STEPDOWN	5-6		STEPDOWN		
	TELE	60-100					TELE	4-6*		H=	120	
	PCU	50-120					PCU	7-10*		L=	50	
	3I/3C	50-120					3I/3C	4-6		TELE		
	4C	50-110					4C	4-6		H=	120	
	SI	50-120					SI	4-6		L=	50	
	GI	50-120					GI	4-6		PCU		
	PICU:						PICU/SDU	7 same for all parameters		H=	120	
	Neonate <30 days	100-200								L=	50	
	Infant >30 days-1yr	70-180								3I/3C		
	Toddler 1-5yrs	50-120								H=	120	
	School Age 6-9yrs	60-140								L=	50	
	Preteen >10 yrs	50-120								4C		
	6E SDU	75-160								H=	120	
	NICU/LEVEL2 NSRY	90-200					NICU/LEVEL2 NSRY	6 same for all parameters		L=	50	
	ER	50-120					ER	4-6		SI		
	OR/PACU	60-100					OR/PACU	Preventive maintenance annually, pre set at audible limit; Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=	110	
										L=	55	
										GI		
										H=	120	
										L=	50	
										PICU		
										H=		
										L=		
										Neonate <30 days	100-200	
										Infant >30 days-1yr	70-180	
										Toddler 1-5yrs	50-120	
										School Age 6-9yrs	60-140	
										Preteen >10 yrs	50-120	
										6E SDU		
										H=	160	
										L=	75	
										NICU/LEVEL2 NSRY		
										H=	200	
										L=	90	
										ER		
										H=	120	
										L=	50	
										OR/PACU		
										H=	120	
										L=	50	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
NBP	Varies per pt. Normal:90/60-120/80		Yes---ON	Can silence but not disable	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	SYS H=160 L=90 DIA H=90 L=50		High
	STEPDOWN	=90-160 D=90-50					Escalating range q 2"??			STEPDOWN		
	TELE	90-120/60-80					STEPDOWN	5-6		H=	160	
	PCU	90-160					TELE	4-6		L=	90	
	3I/3C	90-150/50-90					PCU	4-6		TELE		
	4C	90-180/50-110					3I/3C	4-6		H=	160	
	5I	90-160/50-90					4C	4-6*		L=	90	
	6I	90-160/50-90					5I	4-6		PCU		
	PICU/NICU						6I	4-6		H=	160	
	Neonate <30 days	sys 60-90					PICU/6E	7		L=	90	
	Infant >30 days-1yr	sys 80-110								3I/3C		
	Toddler 1-5yrs	sys 90-110								H=	150	
	School Age 6-9yrs	sys 90-120								L=	90	
	Preteen >10 yrs	sys 90-140								4C		
	6E SDU	sys 70-120								H=	160	
	NICU/LEVEL2 NSRY	sys 40-90					NICU/LEVEL2 NSRY	6		L=	90	
	ER	90-160/50-90					ER	4-6		5I		
	OR/PACU	90-120/60-80					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=	160	
										L=	90	
										6I		
										H=	160	
										L=	90	
										PICU		
										H=		
										L=		
										Neonate <30 days	sys 60-90	
										Infant >30 days-1yr	sys 80-110	
										Toddler 1-5yrs	sys 90-110	
										School Age 6-9yrs	sys 90-120	
										Preteen >10 yrs	sys 90-140	
										6 E SDU		
										H=	120	
										L=	70	
										NICU/LEVEL2 NSRY		
										H=	90	
										L=	40	
										ER		
										H=	160	
										L=	90	
										OR/PACU		
										H=	90-160	
										L=	50-90	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
A LINE(ART/ABP)	Varies per pt. Normal:90/60-120/80		Yes- ON	Can silence but not disable	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	SYS H=160 L=90		High
	STEPDOWN	N/A					Escalating range q 2" or different range??			STEPDOWN	N/A	
	TELE	N/A								H=		
	PCU	N/A					STEPDOWN	N/A		L=		
	3I/3C	90-150/50-90					TELE	N/A		TELE	N/A	
	4C	90-180/50-110					PCU	N/A		H=		
	SI	90-160/50-90					3I/3C	4-6		L=		
	6I	90-160/50-90					4C	4-6*		PCU	N/A	
	NICU (Also Umbilical Artery Line)	sys 40-90					SI	4-6		H=		
	PICU:											
	Neonate <30 days	sys 60-90										
	Infant >30 days-1yr	sys 80-110										
	Toddler 1-5yrs	sys 90-110										
	School Age 6-9yrs	sys 90-120										
	Preteen >10 yrs	sys 90-140										
	LEVEL2 NSRY/SDU	N/A										
	ER	N/A					6I	4-6		L=		
	OR/PACU	90-120/60-80					PICU/6E SDU	7		3I/3C		
							NICU/LEVEL2 NSRY	6		H=	150	
							ER	N/A		L=	90	
							OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud; bedside monitors default low at 5 and max setting at 10.		4C		
										H=	160	
										L=	90	
										SI		
										H=	180	
										L=	90	
										6I		
										H=	160	
										L=	90	
										PICU		
										H=		
										L=		
										Neonate <30 days	sys 60-90	
										Infant >30 days-1yr	sys 80-110	
										Toddler 1-5yrs	sys 90-110	
										School Age 6-9yrs	sys 90-120	
										Preteen >10 yrs	sys 90-140	
										6E SDU	N/A	
										H=		
										L=		
										NICU		
										H=	90	
										L=	40	
										Level 2 Nursery	N/A	
										H=		

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings		Risk Score
								L=		
								ER		
								H=	N/A	
								L=	N/A	
								OR/PACU		
								H=	180	
								L=	70	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
RESP RATE	Varies per pt. Normal:8-12		NO	Can turn off alarm if pt on vent	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	H=30 L=8		High
	STEPDOWN	8-30					STEPDOWN	4-6		STEPDOWN		
	TELE	12-20					TELE	4-6		H=	30	
	PCU	8-30					PCU	4-6		L=	8	
	3I/3C	12-24					3I/3C	4-6		TELE		
	4C	12-24*					4C	4-6*		H=	30	
	5I	8-30					5I	4-6		L=	8	
	6I	8-30					6I	4-6		PCU		
	PICU						PICU/6E SDU	7		H=	30	
	Neonate <30 days	15-60					NICU/LEVEL2 NSRY	6		L=	8	
	Infant >30 days-1yr	15-50					ER	4-6		3I/3C		
	Toddler 1-5yrs	8-30					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=	24	
	School Age 6-9yrs	8-30								L=	12	
	Preteen >10 yrs	5-25								4C		
	6E SDU	8-30								H=	25	
	NICU/LEVEL2 NSRY	20-100								L=	8	
	ER	8-35								5I		
	OR/PACU	8-12								H=	25	
										L=	8	
										6I		
										H=	25	
										L=	8	
										PICU		
										H=		
										L=		
										Neonate <30 days	15-60	
										Infant >30 days-1yr	15-50	
										Toddler 1-5yrs	8-30	
										School Age 6-9yrs	8-30	
										Preteen >10 yrs	5-25	
										6E SDU		
										H=	30	
										L=	8	
										NICU/LEVEL2 NSRY		
										H=	100	
										L=	20	
										ER		
										H=	35	
										L=	8	
										OR/PACU		
										H=	30	
										L=	8	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
02 SAT	Varies per pt. Normal:90-100		Yes- ON	Can silence but not disable	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	h=100 l=90 desat limit=80		High
	STEPDOWN	90-100					STEPDOWN	4-6		STEPDOWN		
	TELE	90-100					TELE	4-6		H=	100	
	PCU	90-100					PCU	4-6		L=	90	
	3I/3C	90-100					3I/3C	4-6		TELE		
	4C	90-100					4C	4-6*		H=	100	
	5I	90-100					5I	4-6		L=	90	
	6I	90-100					6I	4-6		PCU		
	PICU/6E SDU	94-100					PICU/6E SDU	7		H=	100	
	NICU/LEVEL2 NSRY	94-100					NICU/LEVEL2 NSRY	6		L=	90	
	ER	90-100					ER	4-6		3I/3C		
	OR/PACU	90-100					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=	100	
										L=	90	
										4C		
										H=	100	
										L=	90	
										5I		
										H=	100	
										L=	90	
										6I		
										H=	100	
										L=	90	
										PICU/SDU		
										H=	100	
										L=	94	
										NICU/LEVEL2 NSRY		
										H=	100	
										L=	94	
										ER		
										H=	100	
										L=	90	
										OR/PACU		Desat limit: 85
										H=	100	
										L=	90	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	...ority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings & audibility	Default settings		Risk Score
CVP	Varies per pt. Normal:2-6 MMHG		NO	Nursing discretion	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	Mean H= 10		Moderate
	STEPDOWN	N/A					STEPDOWN	N/A		STEPDOWN	N/A	
	TELE	N/A					TELE	N/A		H=		
	PCU	N/A					PCU	N/A		L=		
	3I/3C	3I: 2-8, 3C: 5-15					3I/3C	4-6		TELE	N/A	
	4C	2-8					4C	4-6*		H=		
	5I	2-8					5I	4-6		L=		
	6I	2-8					6I	4-6		PCU	N/A	
	PICU	2-10					PICU/6E SDU	7		H=		
	NICU	N/A										
	6E SDU	N/A										
	LEVEL2 NSRY	N/A					NICU/LEVEL2 NSRY	6		L=		
	ER	0-16					ER	4-6		3I/3C		
	OR/PACU	2-6mmHg					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=	3I: 15, 3C: 15	
										L=	3I: 2, 3C: 5	
										4C		
										H=	10	
										L=	2	
										5I		
										H=	10	
										L=	2	
										6I		
										H=	10	
										L=	2	
										PICU		
										H=	10	
										L=	2	
										NICU	N/A	
										H=		
										L=		
										6E SDU	N/A	
										H=		
										L=		
										LEVEL2 NSRY	N/A	
										H=		
										L=		
										6E SDU	N/A	
										H=		
										L=		
										ER		
										H=	16	
										L=	0	
										OR/PACU	Mean	
										H=	16	
										L=		

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
PAP	Varies per pt. Normal:9-18mmhg		NO	Nursing discretion	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	DIA H=16 L=0		Moderate
	STEPDOWN	N/A					STEPDOWN	N/A		STEPDOWN	N/A	
	TELE	N/A					TELE	N/A		H=		
	PCU	N/A					PCU	N/A		L=		
	3I/3C	10-40					3I/3C	4-6		TELE	N/A	
	4C	10-40					4C	4-6*		H=		
	5I	10-40					5I	4-6		L=		
	6I	10-40					6I	4-6		PCU	N/A	
	PICU	N/A					PICU/6E SDU	7		H=		
	NICU	N/A					NICU/LEVEL2 NSRY	6		L=		
	6E SDU	N/A					ER	N/A		3I/3C		
	LEVEL2 NSRY	N/A					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=	16	
	ER	N/A								L=	0	
	OR/PACU	9 - 18 mmHg								4C		
										H=	10	
										L=	0	
										5I		
										H=	10	
										L=	0	
										6I		
										H=	10	
										L=	0	
										PICU/NICU	N/A	
										H=		
										L=		
										LEVEL2 NSRY	N/A	
										H=		
										L=		
										6E SDU	N/A	
										H=		
										L=		
										ER		
										H=	N/A	
										L=	N/A	
										OR/PACU	Dia	
										H=	16	
										L=	0	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	...ority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
Umbilical Arterial Pressure (UAP)	Varies per pt. Normal:0-5mmhg (5-7 norm in critically ill pt's)		ND	Nursing discretion	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	SYS H=160 L=90		High
	STEPDOWN	N/A					STEPDOWN	N/A		STEPDOWN	N/A	
	TELE	N/A					TELE	N/A		H=		
	PCU	N/A					PCU	N/A		L=		
	3I/3C	N/A					3I/3C	N/A		TELE	N/A	
	4C	N/A					4C	N/A		H=		
	5I	N/A					5I	N/A		L=		
	6I	N/A					6I	N/A		PCU	N/A	
	PICU/NICU	N/A					PICU/6E SDU	N/A		H=		
	LEVEL2 NSRY	N/A					NICU/LEVEL2 NSRY	N/A		L=		
	ER	N/A					ER	N/A		3I/3C	N/A	
	OR/PACU	0-5mmHg (5-7 norm in critically ill pt's)					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10.		H=		
										L=		
										4C	N/A	
										H=		
										L=		
										5I	N/A	
										H=		
										L=		
										6I	N/A	
										H=		
										L=		
										PICU/NICU	N/A	
										H=		
										L=		
										LEVEL2 NSRY	N/A	
										H=		
										L=		
										6E SDU		
										H=	90	
										-	40	
										ER		
										H=	N/A	
										L=	N/A	
										OR/PACU	Sys	
										H=	180	
										L=	70	

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings		Risk Score
TEMPERATURE	Varies per pt ideal: 36.6-37.3		ND	Nursing discretion	Dependent on pt's baseline	NSG/MD depends on pt	When parameters exceeded alarm audible @ level 9		Q shift & PRN	H=39.0 L=		Low
	STEPDOWN	36-38					STEPDOWN	4-6		STEPDOWN		
	TELE	36-38					TELE	4-6		H=	38	
	PCU	36-38					PCU	4-6		L=	36	
	3I/3C	36-38					3I/3C	4-6		TELE		
	4C	36-38					4C	4-6		H=	38	
	SI	36-38					SI	4-6		L=	36	
	6I	36-38					6I	4-6		PCU		
	PICU/NICU	36-38					PICU/6E SDU	7		H=	38	
	LEVEL2 NSRY	36-38					NICU/LEVEL2 NSRY	6		L=	36	
	ER	36-38					ER	4-6		3I/3C		
	OR/PACU	36.6-37.3					OR/PACU	Preventive maintenance annually, pre set at audible limit. Central default low at 4 and max setting at 10, transport: low, medium, high, very loud, bedside monitors default low at 5 and max setting at 10		H=	38	
										L=	36	
										4C		
										H=	38	
										L=	36	
										SI		
										H=	38	
										L=	36	
										6I		
										H=	38	
										L=	36	
										PICU/NICU		
										H=	38	
										L=	36	
										LEVEL2 NSRY		
										H=	38	
										L=	36	
										ER		
										H=	38	
										L=	36	
										OR/PACU		
										H=	38	
										L=	36	

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
UPSTREAM OCCLUSION	Varies	ON	Unable must address to silence alarm	Unable	Must address in order to silence		Nursing/ preference/knowledge	Medium	Moderate
DOWNSTREAM OCCLUSION	Varies	ON	Unable must address to silence alarm	Nursing/ preference/knowledge Can change pressure limit to	←see previous		Nursing/ preference/knowledge	Medium	Moderate
INFUSION COMPLETE	After set vol infused	ON	Unable must address to silence alarm	unable	Must address in order to silence		Nursing/ preference/knowledge	per manufactuer	Moderate
SECONDARY COMPLETE	After set vol infused	ON		unable		Alarms only once, will revert back to previous primary setting	Nursing/ preference/knowledge	per manufactuer	Low
AIR IN LINE	When air detected in line	on	Unable must address to silence alarm	unable	Must address in order to silence		Nursing/ preference/knowledge	per manufactuer	Vary depending on med
CHECK FLOW	After all instances of programing ithe pump		Unable must address to silence alarm	unable	Must address in order to silence		Nursing/ preference/knowledge	1-2 min	Vary depending on med
LOW BATTERY	When battery depleted							Will shut down when no battery life left	Moderate
SCD/ALP: DISCONNECTION ALARM	When tubing disconnected from calf/foot sleeve	Yes- on per manufacturer	Unable	Unable		Alarm will not silence until problem (disconnection) is fixed)	PRN/when at the bedside	per manufacturer	Low
WOUND VAC: AIR LEAK	Leak from wound site	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem (leak) is fixed)	PRN/when at the bedside	per manufacturer	Low
Disconnection	Tubing disconnected from vac	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem (leak) is fixed)	PRN/when at the bedside	per manufacturer	Low
Kangaroo Feeding Pump: Empty bag	When feedings vol infused complete	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem is fixed	PRN/when at the bedside	per manufacturer	Low
No flow	Ie when obstruction noted: kinked tubing, clamed connection, etc	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem is fixed	PRN/when at the bedside	per manufacturer	Low

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Low battery	When battery depleted	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem is fixed	PRN/when at the bedside	per manufacturer	Low
PCA pump: occlusion	When tubing occluded from flow	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem (occlusion)is fixed	PRN/when at the bedside	per manufacturer	High
							Portable pulse ox needs to set to max setting		
Waveform Capnography	Based upon patient	ON	ON	Nurse	Nurse	ICU MMS capnography goes through central station and alarms in the room and centrally. The beside capnography (ward, stepdown) alarms at the machine.	Q. shift	depends on patient	High
Volume infused (empty bag)	When medication volume is given	ON Per manufac	Unable	Unable		Alarm will not silence until problem (new bag is replaced)is fixed	PRN/when at the bedside	per manufacturer	Low
Low battery	When battery depleted	Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until problem (new battery/plug into AC)is fixed	PRN/when at the bedside	per manufacturer	Moderate

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Bed: Hill Rom Total Care: Service alarm	i.d.'s that service is needed		Yes- ON Per manufacturer	Can silence, but not completely disable	Unable		Alarm will not silence until addressed, can silence, but not completely disable	PRN/when at the bedside	per manufacturer	Low
	OR/PACU	Identifies that service is needed	Yes- ON Per manufacturer	Can silence, but not completely disable	Unable?		Alarm will not silence until addressed, can silence, but not completely disable	PRN/when at the bedside	Per manufacturer	
Bed exit alarm	When bed senses that pt is out of the bed		Yes- ON Per manufacturer	Per nursing: can be activate or not	Unable	Per nursing	Alarm will not silence until addressed: have to go to the bed	PRN/when at the bedside	per manufacturer	High
	OR/PACU	When bed senses that pt is out of the bed	Yes- ON Per manufacturer	Per nursing: can be activate or not	Unable?	Per nursing based on fall risk	Alarm will not silence until addressed: have to go to the bed	PRN/when at the bedside	Per manufacturer	
Brakes not set	Bed not locked		Yes- ON Per manufacturer	Unable	Unable		Alarm will not silence until addressed: have to go to the bed & lock bed	PRN/when at the bedside	per manufacturer	High
	OR/PACU	Bed not locked	Yes- ON	unable	unable		Alarm will not silence until addressed: have to go to the bed & lock bed	PRN/when at the bedside	Per manufacturer	
		Per manufacturer								
Air restart (mattress)	When air mattress settings need to be addressed		Yes- ON Per manufacturer	Can silence, but not completely disable	Unable		Alarm will not silence until addressed, can silence, but not completely disable	PRN/when at the bedside	per manufacturer	Low
	OR/PACU	When air mattress settings need to be addressed	Yes- ON Per manufacturer	Can silence, but not completely disable	Unable		Alarm will not silence until addressed, can silence, but not completely disable	PRN/when at the bedside	Per manufacturer	

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Additional Alarms:									
Syringe	All settings must be addressed. Everything is preset	ON	can silence, but not completely disable	Can change parameters	Unable	80-85 db	attendant	per manufacturer	Low
Isolets	shows high or low temperatures, attendant must correct issue	ON	can not dissable	can change to heat or cool	MD-pending	70-85 db	attendant	selectable temp range by attendant	
Incubators/Infant warmers	will alarm if skin temp is +/- 1 degree from set temp, shows high or low temperatures, attendant must correct issue	ON	can silence, but not disable	unable	staff	C-100 65 db, Giraffe 75 db, Omnibed 75 db can silence but not disable	attendant	variable set temp.	Moderate
Ventric	0-20	ending on MD o	Depending on MD order	Depending on MD order	Nurses can disable	Same with other units	Once a shift	Does not show unless being used	High
Hypothermia	shows set temperature, attendant must correct issue	ON	can not dissable	can change to heat or cool	MD - pending patient	70-85 db	attendant	selectable temp range by attendant	
CVVHD	Access: -10 to -250. >250= Access extremely negative. Filter: -50 to +450 Effluent: -350 to +450 Return: +15 to +350. >350= Return extremly positive. Pressure drop: 0 to 300 TMP (Transmembrane pressure): 0 to 450	ON	Cannot disable.	Cannot change parameters	N/A	N/A	Dialysis sets up machine. It is up to ICU to monitor machine.	Access: -10 to -250. >250= Access extremely negative. Filter: -50 to +450 Effluent: -350 to +450 Return: +15 to +350. >350= Return extremly positive. Pressure drop: 0 to 300 TMP (Transmembrane pressure): 0 to 450	Moderate
Dialysis	Will alarm if arterial/venous pressures are +/- 50	On	can silence, but not completely disable	Unable	HD Nurse	Preset	Prior to use on pt, Daily	+/- 50	High
Transport Monitors	shows high or low alarms, attendant must correct issue	ON	can silence, but not disable	Can change	depends on patient	default 75 db	attendant	low, medium high	High
Defibrilator	shows high or low alarms, attendant must correct issue	ON	can silence/cancel, but not disable	dependent on patient	dependent on patient	85, 90, 95 db	attendant	low, medium high	High
Bear Huggers	shows over temp alarms, attendant must correct issue	ON	silence only	pending patients need	temp adjustable by attendant	preset alarm volume 65 db	attendant	preset temps - 32C, 38C, 43C	
Cardio Pulmonary Bypass Machine	audible alarm only, attendant must trouble shoot	ON	silence only	unable	can not dissable	75 db	alarms are preset	factory preset	High
Fluid Warmers	setable fluid temp	ON	can not dissable	pending patients need	attendant	95 db	alarms are preset	40 deg. C	Moderate
Rapid Infusers	setable fluid temp	ON	can not dissable	pending patients need	attendant	96 db	alarms are preset	40 deg. C	Moderate
Code Blue Alarms	no parameters	ON	cant dissable but can cancel	unable	N/A	f/u needs to made louder	manufacturer pre set	manufacturer pre set	High
Nurse Call System	No alarm parameters, however, there is an escalation alarm if someone doesn't answer the emeregency call in the bathroom	On	None	N/A	N/A	N/A	Always on	N/A	Moderate

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Personal alarms in psych (I /u w D . Rhodes)	Unit based parameters	ON	When situation is resolved	N/A	None	Goes off at nurses station. Should not be silenced or disabled unless situation is resolved	Q. shift	N/A	High
TOT Guard	N/A	ON for specific units: NICU does not use it 6E SDU uses on some on DCFS hold Level II uses it and 7W use it.	When baby is being transported or moved to another unit.	N/A	Nurses can disable	Goes off at nurses station.	No checking	No change	High
Fetal Heart Rate	Below 120 above 160 for over 5 minutes	ON	May silence but not disable.	May change parameters if aware of known fetal heart rate abnormal rate.	RN	Continuously monitored for alarms.	Every shift and PRN.	120-160	High
Signal Loss	1.25 seconds of absence or 70% signal loss in 5 minutes for intermittent signal loss.	ON	May silence but not disable.	None	RN	Continuously monitored for alarms.	Every shift and PRN.	A continuous fetal heart rate.	High
End tidal C02 monitoring (3W ICU)	35-45	ON	Only when pt is transferring and pt status	N/A	MD (change paramters only)	Alarms at nurses desk and at pt's bedside per manufacturer	Every 2H	35-45	High
PICU C02 monitoring	alarm controled by bed side monitor	ON	can not dissable	unable	unable	same as bed side alarm	attendant	On monitor 65 db to 95 db	High
		ON	Only when pt is transferring and pt status	Per MD orders	MD (change paramters only)	Alarms at bedside per manufacturer	Every 2H	• No breaths - 30+ • ETCO2 less than 15 and 60+ • RR less than 5 and 30+ • SpO2 less than 85 -100 • Pulse Rate less than 50 - above 140 • IPI less than 3	High

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
STEPDOWN									
ViOptix (for flaps)	40%-100% SATURATION (MACHINE IS SET TO ALARM AT 45%) PAGE PLASTIC SERVICE FOR <40% SATURATION WITH A STABLE READING OR DROP IN % SATURATION OF 20% OR > IN LESS THAN AN HOUR WITH A STABLE READING. FLUCUATIONS ARE OK AND WILL HAPPEN CONSISTENTLY, IT'S THE STABLE READING. MACHINE WILL START ALARMING AT 45%	ON	Cannot be silenced	Depending on the pt status according to the surgeon.	ONLY THE PLASTIC SERVICE (FELLOWS, ATTENDINGS, NP) CAN DISABLE/CHANGE PARAMETERS.	THERE ARE VOLUME SETTINGS OF 1-5, 1 IS THE QUIETEST AND 5 IS THE LOUDEST, IF THE STAFF CAN NOT HEAR FROM OUTSIDE ROOM, IT IS TO QUIET, VOLUME SETTING DEFAULT IS 3	Round2x day. Nurses must check when alarm goes off.	ARE FIXED PROGRAMED FOR OUR SERVICE FOR 40-100% FOR PARAMETERS, ALARM TO START AT 45% AND POOR QUALITY SIGNAL AND REPORTING VOLUME AT 3	High

ADDITIONAL OPERATING ROOM EQUIPMENT

Type of Equipment: Thermoflator (insufflator)

Type of Alarm	Parameters	Mandatory On/Off	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score			
Pressure	Varies depending on surgeon preference	Yes- ON	Cannot be disabled, must address to silence the alarm	Depending on surgeon's preference/parameters	N/A	Alarms stops when pressure is at normal limits or within parameter	Per patient/procedure	15mmHG	Moderate			
Gas Flow	Varies depending on surgeon	Yes-ON	Volume can be lowered but not disabled	Surgeon's preference	N/A	Alarm stops when flow is back normal limits or parameter	Per patient/procedure	1.0L/min	Low-Moderate			

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Type of Equipment: Electrosurgical Unit									

Type of Alarm	Parameters	Mandatory On/Off	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Default settings			
REM	When disconnected from patient or from unit	Yes- ON	Cannot be disabled, must address to silence the alarm	Cannot be changed	N/A	Alarm volume may be lowered	Per use/per patient	Everytime it is not connected the "REM" alarm shows	Low			
Coag	Alarms when pencil or disposable is activated	Yes-ON	Volume can be lowered but not disabled	Surgeon's preference		Alarm volume can be lowered	Per patient/per use	15	Low			
Cut	Alarms when pencil or disposable is activated	Yes- ON	Volume can be lowered but not disabled	Surgeon's preference	N/A	Alarm volume can be lowered	Per patient/ per use	15	Low			

Type of Alarm	Parameters	Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Type of Equipment: Automatic Tourniquet System									

Type of Alarm	Parameters	Mandatory On/Off	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings &audibility	Default settings	Risk Score
Battery low	Per manufacturer Zimmer ATS	ON	N/A	N/A	none	Plug the unit into an AC power source while the system is operating or in storage. Recharge the battery for 24Hours	Per use	N/A	Low
Cuff infl	Per surgeon	ON	N/A	Per surgeon	none	Immediately check the pressure setting to see if it needs to be reset to a new value	Per use	Defaults to the last setting it was on	Low
Cuff not defl	Per surgeon	ON	N/A	standard	none	Check for kinks in hose(s). If the alarm persists, disconnect hose(s) from cuff. If attempting to set unit to STANDBY, ensure that cuff is fully deflated and has been removed from the patient	Per use	N/A	Low
Leak	Manufacturer Zimmer ATS	ON	N/A	N/A	none	Check all hose connections. Replace the cuff(s) and hose(s) if leak persists.	Per use	N/A	Low

Type of Alarm	Parameters		Mandatory ON/OFF	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels		Checking alarms for settings &audibility	Default settings	Risk Score
Lo-P	Manufacturer Zimmer ATS	ON	N/A	N/A	none	Check hose(s) for knks or loose connections. Replace cuff(s) and hose(s) if the alarm persists.	Per use	N/A	Low		
Res leak	Manufacturer Zimmer ATS	ON	N/A	N/A	none	Do not use the unit. Service the unit	Per use	N/A	Low		
Time up	Per surgeon	ON	N/A	Per surgeon	none	Reset the clock by pressing and holding both the TIME INCREASE (+) and the TIME DECREASE (-) switches	Per use	N/A	Low		

Harbor-UCLA Medical Center
Appendix of Ventilator Alarms 2019

SEA # 50 Clinical Alarms

Type of Alarm	Parameters	Mandatory On/Off	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/Responding decibels	Checking alarms for settings & audibility	Default settings
AVEA								
Low Peak Pressure	3-99 cmH2O	ON	Can silence but not disable	Dependent on ventilator pressure settings	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	3 cmH20
High Peak Pressure	10-105 (peds/adult) 10-85 (neo)	ON	Can silence but not disable	Dependent on ventilator pressure settings	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	40 cmH20 (adult /peds 30neo
Low PEEP	0-60cmH2O	Can be turned OFF	Can silence or turn OFF	Pt's PEEP setting	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	3 cmH20 (adult/peds) 1 neo
Low Exhaled Minute Volume	0-50L (adult) 0-30L (peds) 0-5L (neo)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	1L (adult) .5L (peds) .05L (neo)

High Exhaled Minute Volume	0-75L (adult) 0-30L (peds) 0-5L (neo)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	30L (adult/peds) 5L (neo)
Low Exhaled Tidal Volume	0-3L (adult) 0-1L (peds) 0-.3L (neo)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	0 (neo/ peds/ adult)
High Tidal Volume	.1-3L (adult) 25-1000 ml(peds) 2-300ml (neo)	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	3L (adult) 1L (peds) .3L (neo)
High Resp. Rate	1-200bpm	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	75bpm
Apnea	6-60 sec.	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Can be adjusted but not turned off (not measured in decibles)	Q shift & with setting changes	20 sec.

Type of Alarm	**Parameters**	**Mandatory On/Off**	**Criteria to disable**	**Criteria to change parameters**	**Authority to disable/change parameters**	**Monitoring/ Responding decibels**	**Checking alarms for settings &audibility**	**Default settings**
SERVO 300								
High Peak Pressure	15-120 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP		Q shift & with setting changes	No default

High Continuous Pressure	Set PEEP+15cmH2O for 15 sec.	ON	Can silence but not disable	Unable to change	RCP		Q shift & with setting changes	Set PEEP+15cm H2O for 15 sec
High Exhaled Minute Volume	0-60 L/m (adult/ peds) 0-6 L/m (neo)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP		Q shift & with setting	No default
Low Exhaled Minute Volume	.3-40L/m (adult/ peds) .06-4 L/m	ON	Can silence but not disable	Dependent on pt's baseline	RCP		Q shift & with setting changes	No default
Apnea	20 sec. (adult) 15 sec. (neo/ peds)	ON	Can silence but not disable	Unable to change	RCP		Q shift & with setting changes	20 sec. (adult) 15 sec. (neo/ peds)
SERVO I								
High Peak Pressure	16-120 cmH2O (adult) 16-90 cmH2O (infant)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	
Low ExhaledMinute Volume	.5-40 L/m (adult) .1-20 L/m (infant)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	
High Exhaled Minute Volume	.5-60 L/m (adult) .1-30 L/m (infant)	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	
Low Resp. Rate	1-35 bpm	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	
High Resp. Rate	1-160 bpm	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	

Type of Alarm	Parameters	Mandatory on/off	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/ Responding decibels	Checking alarms for settings &audibility	Default settings
Vision BiPAP								
High Pressure	5-50 cmH2O							
Low Pressure	0-40 cmH2O	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Low Pressure Delay	0-60 sec.	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Apnea	Disable,20,30 ,40 sec.	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Low Minute Ventilation	0-99 L/m	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Hi Rate	4-120 bpm	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Low Rate	4-120 bpm	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Respironics STD								
High Pressure	2-50 cmH20	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Low Pressure	2-25 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	No Default
Nellicor N-85 ETCO2 Monitor								
EtCO2 High	5-100	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	0mmHg
EtCO2 Low	0-99	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Q shift & with setting changes	Q shift & with setting changes	0mmHg
Type of Alarm	Parameters	Mandatory On/Off	Criteria to disable	Criteria to change parameters	Authority to disable/ change parameters	Monitoring/ responding decibels	Checking alarms for settings/ audibility	Default settings

SERVO I (cont'd)								
Low PEEP	0-47 cmH2O	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	Low PEEP
High Cont. Pressure	Set PEEP +15 cmH2O for 15sec.	ON	Can silence but not disable	Unable to change	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	Set PEEP +15cmH2O for 15 sec
Apnea	15-45 sec. (adult) 5-15 sec. (infant)	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Volume can be adjusted 10-100%	Q shift & with setting changes	20 sec. (adult) 10sec. (infant)
Sensor Medics 3100A								
High Mean Airway Pressure	0-49 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Volume cannot be adjusted	Q shift & with setting changes	No Default
Low Mean Airway Pressure	0-49 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Volume cannot be adjusted	Q shift & with setting changes	No Default
Sensor Medics 3100B								
High Mean Airway Pressure	0-59 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Volume cannot be adjusted	Q shift & with setting changes	No Default
Low Mean Airway Pressure	0-59 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Volume cannot be adjusted	Q shift & with setting changes	No Default

Type Of Alarm	Parameters	Mandatory On/Off	Criteria to disable	Criteria to change parameters	Authority to disable/change parameters	Monitoring/ responding decibels	Checking alarms for settings/ audibility	Default settings
VIP Bird								
Apnea	10-60sec.	ON	Can silence but not disable	Dependent on pt's baseline	RCP	66-85 db	Q shift & with setting changes	No Default
Low Peak Pressure	3-80 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	66-85 db	Q shift & with setting changes	No Default
High Peak Pressure	3-120cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	66-85 db	Q shift & with setting changes	No Default
Low CPAP/PEEP	0-24cmH2O	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	66-85 db	Q shift & with setting changes	No Default
High resp. rate	0-300bpm	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	66-85 db	Q shift & with setting changes	No Default
PB7200								
High Peak Pressure	10-120 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	120 cmH2O
Low Peak Pressure	3-99 cmH2O	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	3 cmH2O
Low PEEP	0-40 cmH2O	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	0 cmH2O
Low Exh. Tidal volume	0-2.5 L	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	0 L
Low Exh. Minute volume	0-60 L	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	0 L
High Rate	0-70 bpm	Can be turned OFF	Can silence or turn OFF	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	0 bpm
Apnea	10-60 sec.	ON	Can silence but not disable	Dependent on pt's baseline	RCP	Alarm level 1-10	Q shift & with setting changes	20 sec.