

## Ultra Deep Freezer, -40



Environmentally friendly Ultra Deep Freezer, -40 degree powered by Meditech Technology for safe storage .

### Stable Temperature Control

Temperature is controlled by two sensors located in the liquid-loaded **monitor bottles**,

**Two thermistor sensors** constantly monitor the temperature in both the upper and the lower part of chamber.

**Microprocessor control** ensures the most accurate temperature control available.



Designed to conform to AABB criteria, the series ensures stable and reliable temperature control utilizing Meditech original technology. A special highly efficient compressor designed and used by Meditech provides rapid cooling and quiet performance for each model.

### Temperature Variations Prevented

The Meditech MTUDF Series is designed to minimize cold air loss even with frequent door openings.

**Separated transparent inner doors** minimize the chamber air leakage during door openings.

Foamed-in-place insulation in the walls and magnetic sealed outer doors with prevent chamber air leakage and promote complete door closings

### User Friendly Design

Selectable storage system **LED interior lamp** with ON/OFF switch

Eye Level Digital display is easy to see, and is calibratable through the control panel Filterless construction eliminates bothersome filter cleaning Temperature recorder with rechargeable battery back up including charger maintenance free and insensitive to vibration. 12 Volts Battery NIMH and 1 Ampere charger.

### Alarm and Safety Functions

To ensure the safety of precious blood supply, the Meditech Series provides the following safety functions:

**Audible and flashing LED visual alarms** with remote alarm contacts, in case of power failure, high or low temperature

Door Alarm and key lock are standard features



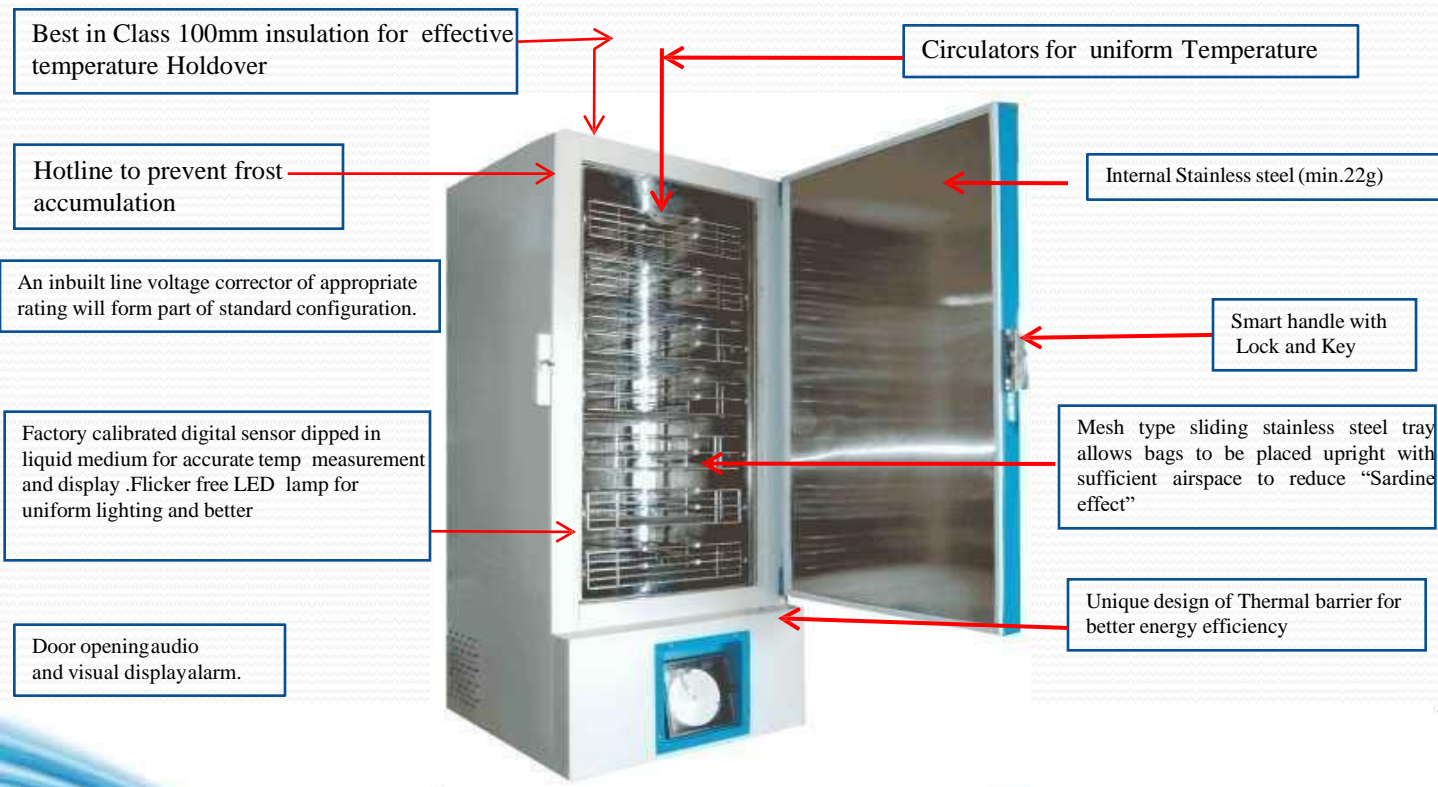
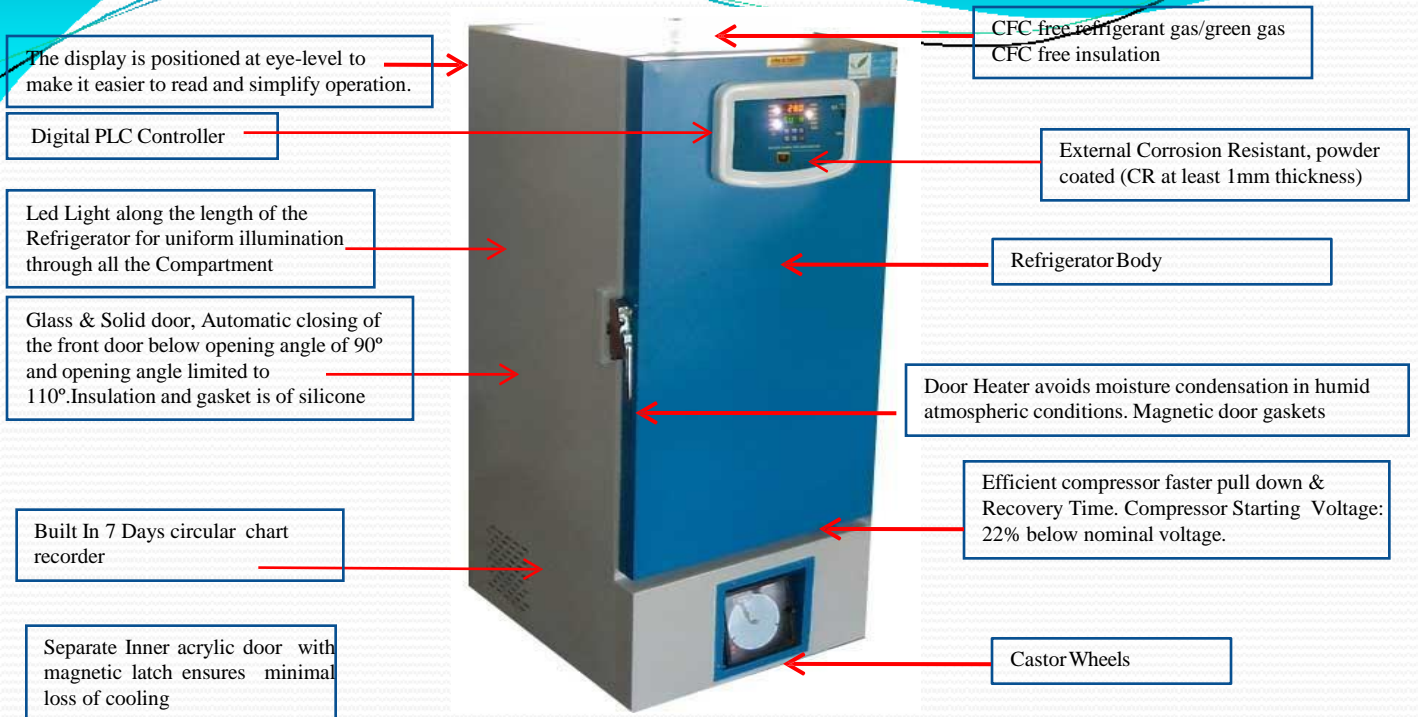
**Multi air-flow plenum system** ensures excellent temperature uniformity in larger capacity models.

**Temperature-maintained defrost** designed with thermal sensors and heaters on the evaporator, all under precise microprocessor control.



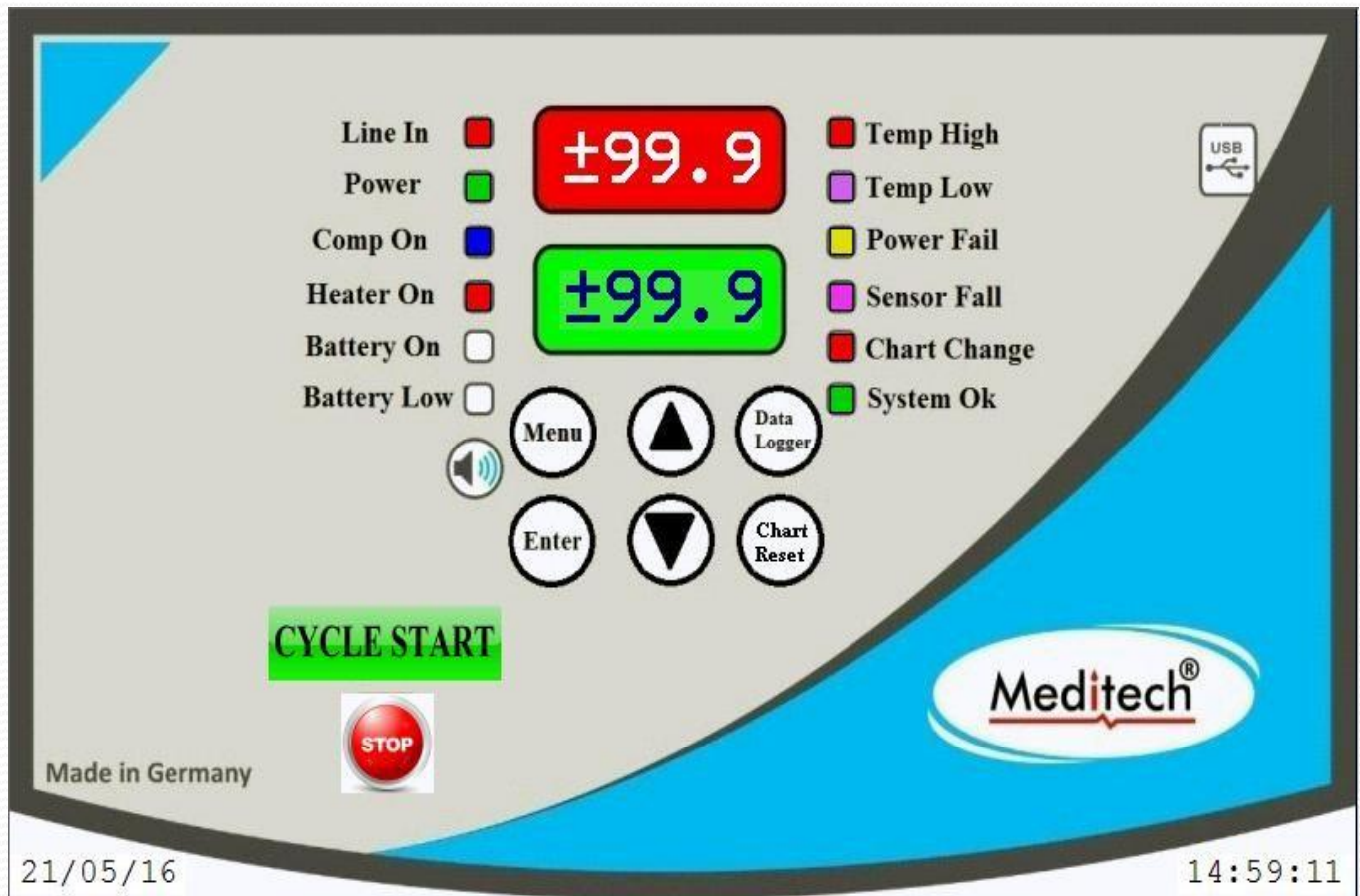
# 2 Know your Machine

Equipment meets electrical safety specification such as that of IEC (Class I)






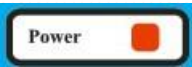









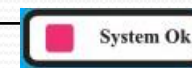
## 5.0 PLC Based Touch Screen Controller



Meditech has pioneered in the field of PLC Touch Screen Controller with BMS. The PLC Based is the latest and the most effective technology which gives an individual to easily understand and operate the machine. We shall discuss in details about how to use the controller







Meditech Refrigerators has built in stabilizer

## 6.0 LED Indicators

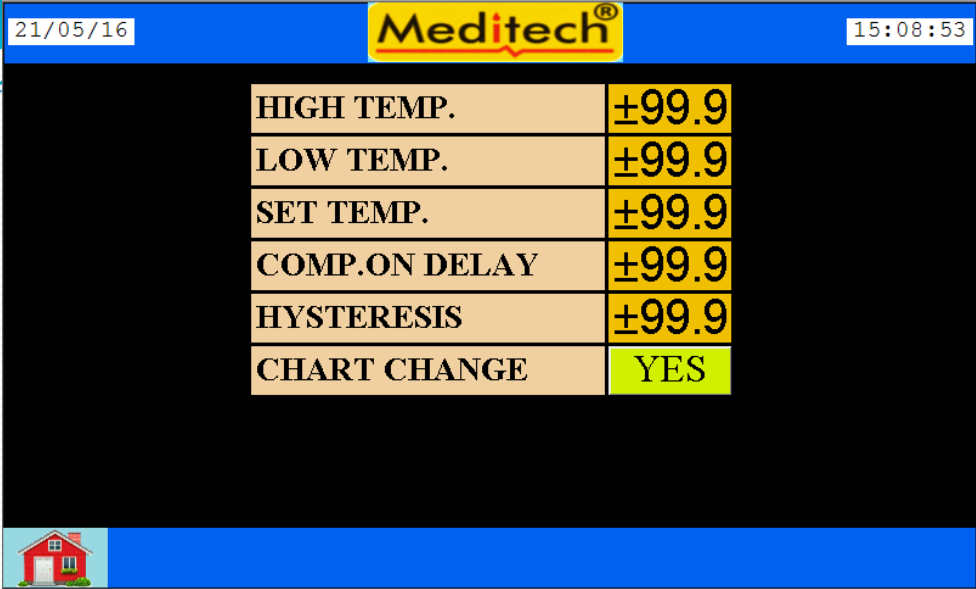
Sl.No	Photos	Function Indication
1.		This LED is on when there is a power supply to the machine from the main source
2		This LED is on when the Controller is in working condition.
3		This LED is on when the compressor is in working condition
4		This LED is on when the heater is in working condition
5		This LED is on when the battery is in working condition
6		This LED is on when the battery is discharged
7		This LED is on when the inside compartment temperature of the refrigerator is high above the set temp
8		This LED is on when the inside compartment temperature of the refrigerator is Low below the set temp
9		This LED is on when there is power failure.
10		This LED is on when there is sensor fail
11		This LED is on when after 162 hours of charge change ( 6 hours before the completion of 7 days)
12		This LED is on when all functions of the System is in working condition

# 7.0 Keypad Functions



Sl.No	Photos	Function Indication
1		The Menu button is pressed to enter into MENU option.
2		The Enter button is pressed to enter into “ENTER” option.
3		The Up Arrow button is pressed to go Upwards in the menu option.
4		The Down Arrow button is pressed to go Downwards in the menu option.
5		The data logger is pressed to get the data from the PLC to the computer
6		This button has to be pressed after chart change.

# 8.0 MENU FUNCTIONS



Functions	Description
High Temp	<b><u>High Temperature Alarm</u></b> User can set the high temperature point at which the high temperature Alarm function should work Use the up and down key to change the temperature
Low Temp	<b><u>Low Temperature Alarm</u></b> User can set the Low temperature point at which the Low temperature Alarm function should work Use the up and down key to change the temperature
Set Temp	<b><u>Set Freezer Temperature</u></b> User can set the working temperature of Freezer Use the up and down key to change the temperature
Comp On Delay	<b><u>Compressor Delay at starting of Freezer</u></b> used to the delay in starting the compressor. Use the up and down key to change the temperature
Hysteresis	<b><u>Hysteresis</u></b> Hysteresis is set to cut off and restart the compressor. If the set temperature is 2 degree C and Hysteresis is set to 4 degree C. Then the compressor will cut off after
Chart Change	<b><u>Chart Change</u></b> This option is used to use the chart option.  <u>Press Yes to use the chart Press NO for not using the chart</u>



## 9.0 MENU SETTINGS


21/05/16

Meditech®

15:10:02

HIGH TEMP.	±99.9
LOW TEMP.	±99.9
SET TEMP.	±99.9
COMP.ON DELAY	±99.9
HYSTERESIS	±99.9
CHART CHANGE	YES

Factory Setting Done



Yes

No

Functions	Description
Factory Setting	Factory setting is done to change all the parameters to default options.

## 11.0 DATA LOGGER

21/05/16

Meditech®

15:06:20

	DD	MM	YY	HR	MN	SEC	LOG TIME
START	99	99	99	99	99	99	99 Min
END	99	99	99	99	99	99	

FILE NAM	#####	GROUP NO	99	MEMOR Y USAGE	999 %
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UPLOAD STATU	<div> <div></div> <div>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</div> </div>	99	Transfer Data
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This Menu function is used to transfer Log Data to Pen Drive

# 10.0 CLOCK AND CALENDER

21/05/16

Meditech®

15:01:14

CLOCK AND CALENDER

CLOCK

HR

99

MN

99

SS

99

CALENDER

DD

99


MM

99

YY

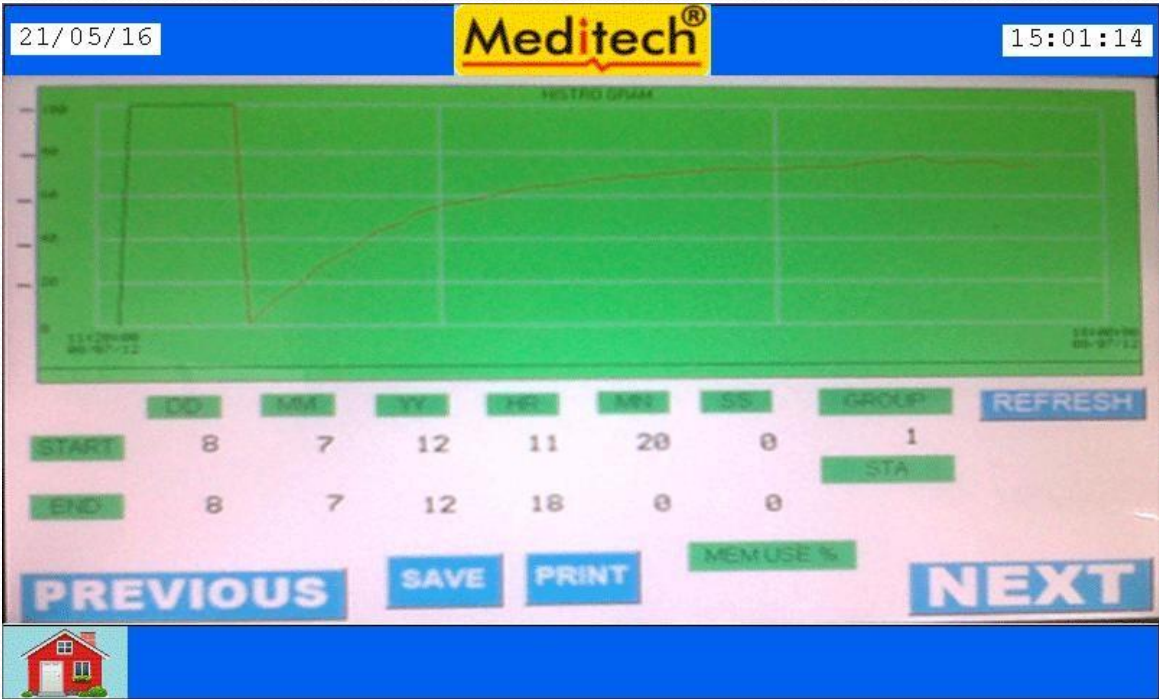
99

ENTER



This Menu function is used to set **Clock and Calender**

# 10.0 HISTOGRAM



User can set last 24 hour temperature in graphical form. There is also option to view temperature and graph plots for last 6 months.  
Data of power failure and resumption in last 24 hours with date & time.



## MTUD Series

Model	MTDF01	MTDF02	MTDF03
Type	Vertical		
Effective storage volume	165 Litre	300 Litre	650 Litre
Trays (removable type)	4 stainless steel slide out trays	6 stainless steel slide out trays	6 stainless steel slide out trays
Steel door hinge	SS 304		
Steel door ring	SS 304		
Door	made of 1.8mm CR Sheet, powder coated with structure finish and filled with formed in position PUF		
Miniature Circuit Breaker (MCB)	240V / 10A		
Cabinet material	18 SWG Galvannealed Powder coated Steel Sheet 304 Anti Bacterial		
Inner chamber	22 SWG Stainless Steel Sheet 304 Anti Bacterial		
Input voltage	160- 270 V, 50Hz, single phase AC		
Stabilizer	4KVA stabilizer		
Chamber temperature range	-40°C		
Air circulation inside the chamber	Continuously operated forced air circulation using the evaporator fan		
Operation	operating continuously in ambient temperature of 10 - 50deg C and relative humidity of 15-95%		
Slide out rail	Heavy duty telescopic rail		
Lamp	LED Lamp 14W / LED Lamp		
Compressor	Hermetically sealed compressor		
Refrigerant	R404a		
Wheels	Caster wheels		
Temperature sensing method	Encapsulated digital sensor dipped in 0.25% glycerine solution kept in a plastic bottle		
Temperature controller	Temperature Recorder and Control Unit (TRCU)		
Accuracy of temperature sensor	(+/- 0.5°C)		
Display	4x7 segment LED (red)		
Display resolution	0.5°C		
Alarms & Indications	Line in	Visual	
	Power	Visual	
	Compressor ON	Visual	
	Heater ON	Visual	
	Temperature High	Audio - Visual	
	Temperature Low	Audio - Visual	
	Door open	Audio - Visual	
	Battery Low	Visual	
	Battery ON	Visual	
	Power failure	Audio - Visual	
	Sensor failure	Audio - Visual	
Certifications	ISO9001, ISO13485, ISO14001, CE , WHO- GMP		
Safety Standards	Electrical safety conforms to standards for electrical safety IEC-60601		

1. Meditech can manufacture freezers according to customer Specifications and size
2. Full SS Body with life time warranty available on customer demand

# Software for Blood Bank

**Software for Blood Bank shall be provided free of charge with this product.**

The screenshot displays the 'Create Donor' interface of the Meditech Blood Bank application. The main form area contains the following elements:

- Date:** A dropdown menu showing '12/12/2013'.
- NIC No.:** A text input field with the value '0'.
- Name:** A text input field.
- Address:** A text input field.
- Sex:** Radio buttons for 'Male' and 'Female'.
- Mobile:** A text input field.
- Photo Path:** A text input field with a file selection icon.
- Buttons:** 'Submit' and 'Cancel' buttons at the bottom.

The right sidebar features a user profile for 'Yusuf - #102030' with the ID '3823898931298' and the email 'yusuf@barhanitechnologies.com'. It includes a 'Show Image' button and links for 'Phone', 'Collection List', and 'Add Collection'.

**Meditech**

Donor List

Search Donor  
 Add Donor  
 Donor List  
 Donor Profile  
 Donor History  
 Donor Report  
 Donor Transfer  
 Donor Search

Register Date	Reg Number	Name	Blood Group	Address	Gender	Mo
14/03/2013 12:00:00 AM	102030	Yusuf	B+	232, Mawani Street	Female	382389

Show Image

Yusuf - #102030  
 382389893298  
 yusuf.q@burhanitechnologies.com

Home Add Collection

1 2 3 4 5 6 7 8 9 10

Start

The screenshot displays the Meditech software interface. On the left, a blue sidebar contains a menu with options: Home Page, Nurse List, Overview, Equipment Preparation, Storage, Nurses, Nurse Support, Stock Order, and Patient Care. The main area shows the 'Add Freezer' window, which includes fields for Number (or ID), Capacity, Port, Radio, Freezer type, and Shelves, along with a Remarks text area. To the right, a panel shows connection status information: Number (or ID), Connection Status, IP 1, Port 1, Capacity, and buttons for View Details and Add Params. Below this, the 'Freezer Params' window is open, featuring a table with columns for Name, Address, and Type, and buttons for Filter, Cancel, and Delete. The table currently contains one entry with Name (A4), Address (\*, A4), and Type (\*).

[illegible]

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