All smd resistors are 0805 size
All SMD Capacitors are 1206 size

Test your build before attaching the screen, first algorithm on eeprom 1 will be active, both times I tried to remove a screen I damaged it so make sure the effect works before attaching the screen

Drilling 8mm pot holes helps with aligning the screen

Use stiff wire to connect the footswitch to the pcb, it adds strength to the screen

Remove sd card socket from back of screen, unsolder 2 points at edge of board, then it just pulls up, wiggle it and it snaps off

Build order I use:

1. Smd resistors
2. Smd capacitors
3. Smd diode, power regulators, smd ic's
4. Crystal
5. Zener diode(Reversed!) sockets, led, trimmer
6. Pots
7. Wires, in out 9v gnd and analog gnd
8. Stm32 bluepill board
9. Screen

Fitting the screen:
Fit screen into pcb holes, don't solder it yet
Fit circuit inside enclosure, tighten pot nuts
Press top pins down solder a pin
Press bottom pins down solder 2 pins opposite ends
Remove from enclosure and solder the other pins, screen should now be flush to the inside of enclosure

Code is uploaded using the Arduino IDE
and using a FTDI USB to Serial adapter
Connect RX to RX, TX to TX, GND to G
and power the circuit
Meter reading is done using a red 5mm led and a standard ldr
Cover them with black shrink tube
Adjust the needle sensitivity using the trimmer

Remove potentiometer mounting pins, use sticky pads under the pots

arduino sketch will load up to 24 programs, 2 eeproms + the fv1 internal programs

i have it currently set to 21,
16 programs on the 2 eeproms + 5 internal fv1 programs

to change it, add or remove a case:

```
case 21:
        tft.setFont(&TypoHoopRegular20pt7b);
        tft.setTextColor(ILI9341_WHITE);
        tft.setTextSize(1);
        tft.fillRect(0, 0, 240, 100, ILI9341_RED);
        tft.setCursor(32, 40);
        tft.print("FV-1 Rom");
        tft.setCursor(32, 85);
        tft.print("Reverb 2");

        tft.setFont(&TypoHoopRegular10pt7b);
        tft.setTextColor(ILI9341_WHITE);
        tft.fillRect(8, 113, 139, 22, ILI9341_BLACK);
        tft.setCursor(10, 128);
        tft.print("Size");
        tft.fillRect(8, 156, 138, 22, ILI9341_BLACK);
        tft.setCursor(10, 171);
        tft.print("HF Filter");
        tft.fillRect(8, 199, 139, 22, ILI9341_BLACK);
        tft.setCursor(10, 214);
        tft.print("LF Filter");

        digitalWrite(PB4, LOW); //high ext, low int
        digitalWrite(PB7, HIGH); //eprom1 off
        digitalWrite(PB5, LOW); //eprom2 on
        digitalWrite(PB12, HIGH); //s0
        digitalWrite(PB13, HIGH); //s1
        digitalWrite(PB14, HIGH); //s2
        delay(50);
        break;
```

also increase or decrease these numbers for every case you add or remove:
if (buttonPushCounter >= 22)
and
buttonPushCounter = 21;